The United States Army Field Band

The Musical Ambassadors of the Army

Washington, DC

Euphonium Topics

by

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WHAT'S IN A NAME?

What is the difference between a euphonium and a baritone horn? While some people think that the difference is the number of valves or the number of bells, the real difference is in the diameter of the tubing, or bore size. A European baritone horn has a considerably smaller bore size than a euphonium does, similar to the difference between a cornet and a flugelhorn. The American-made baritone horn has a bore size in between a European baritone horn and a euphonium, but closer in size to a euphonium. The larger bore of the euphonium gives it a darker, fuller sound preferred by most professionals and advanced students.

BASS AND TREBLE CLEF

Unlike the music for other instruments in the band, music for the euphonium is printed in two different forms: a non-transposing bass clef part like the trombone, and a Bb transposing treble clef part sounding an octave below the trumpet, like the tenor saxophone. This can make it easy for either a trombone player or a trumpet player to learn to play euphonium.

In virtually all American band music, similar sounding bass and treble clef parts are available, so it is not essential for a beginning player to learn both. Many European band arrangements, however, have bass and treble clef parts that are different—in fact, they are often written for different instruments, with the euphonium part in bass clef and the baritone part in treble clef. Some solo music and much small ensemble and chamber music is only available in one clef, usually bass. Also, a euphonium player who reads both clefs can borrow solo and ensemble music and etudes from many other instruments including trombone, trumpet, clarinet, and cello. To learn a diverse repertoire, euphonium players need to know both bass and treble clefs.

BREATHING AND SUPPORT

In order to take a full, quick breath, the throat has to be relaxed and open. The lungs must expand and fill first from the bottom. To do this, the diaphragm, a large muscle that separates the chest cavity from the abdominal cavity, must push forward and down, causing the stomach to protrude slightly as the muscles around the waist relax. When this is done, the lungs can expand to their maximum extent, filling sideways as well as downwards. The diaphragm should move first to let the lower lungs fill. The upper lungs fill last, although the whole process must happen quickly and smoothly so that it feels nearly simultaneous.

When exhaling in order to produce a note, the breath must be supported. During normal, quiet breathing, the diaphragm relaxes passively as the air gently escapes the lungs; however, while playing a wind instrument the waist muscles should be contracted. This forces the internal organs of the upper abdomen up against the diaphragm, increasing the pressure to push the air out of the lungs. This provides the breath support necessary to project the tone.

ARTICULATION

For a normal attack, not accented and not legato, the tip of the tongue should be pulled downward from a point near the gumline of the upper front teeth. Depending on the shape of the mouth, the actual point of contact might be the back of the teeth or a little farther back on the roof of the mouth.

Sometimes tonguing problems are actually lip problems. Harsh, clumsy, or indistinct articulation is frequently attributed to the lips. If they are not set properly to vibrate at the correct pitch, the note either refuses to speak or sounds muddy. Tonguing harder or playing louder will not solve the problem. Instead, the lips must accurately predetermine the desired pitch before the tongue initiates the attack. The more precisely the player thinks about the exact pitch, the better the lips will be prepared to play, and the better the note will speak.

RECOMMENDED RESOURCES

Method Books

Arban's Complete Conservatory Method (Treble Clef) ..... Jean Baptiste Arban, ed. Goldman and Smith (Carl Fischer)

Famous Method for Trombone and Baritone (Bass Clef) ..... Jean Baptiste Arban, ed. Mantia & Randall (Carl Fischer)

Melodious Etudes for Trombone, Volumes I, II, and III ..... G. M. Bordogni, ed. Joannes Rochut (Carl Fischer)

Technical Studies (Bass Clef) ..... Herbert L. Clarke, ed. Claude Gordon (Carl Fischer)

Lip Flexibility on the Trumpet ..... Walter M. Smith (Carl Fischer)

Method for Baritone ..... Walter Beeler (Warner Brothers)

70 Beginning and Early Studies ..... David Uber (PP Music)

Solo Literature

Tom Binkley's Tune ..... H. Cowell (Presser)

Aria and Allegro ..... Franz Joseph Haydn (Rubank)

Song to the Evening Star ..... Richard Wagner (Kendor)

Andante and Allegro ..... J. Edouard Barat, arr. Forrest Buchtel (Southern Music)

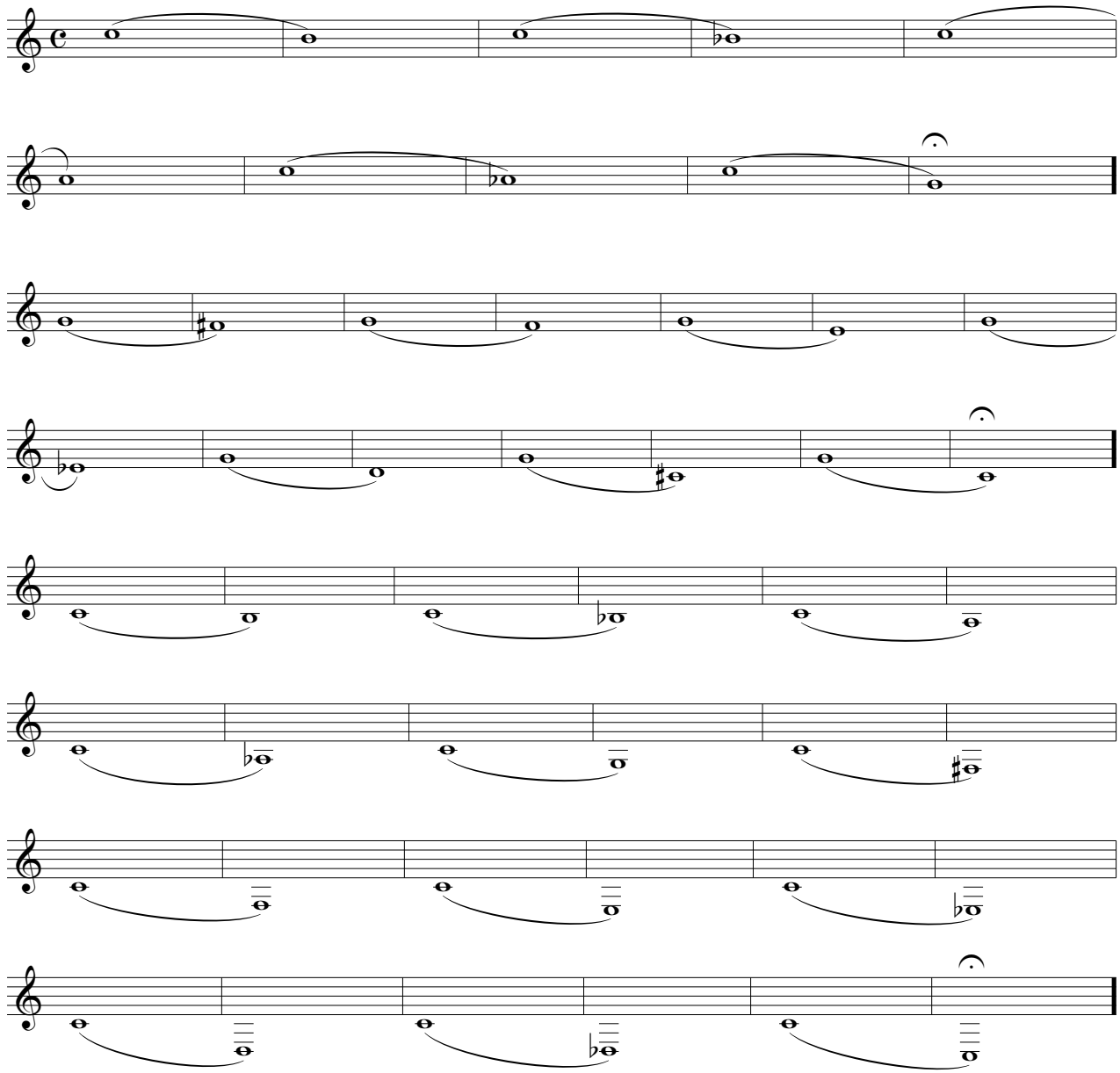
Morceau Symphonique, op. 88 ..... Alexandre Guilmant (Warner Brothers)

Andante et Allegro ..... J. Guy Ropartz (Carl Fischer)

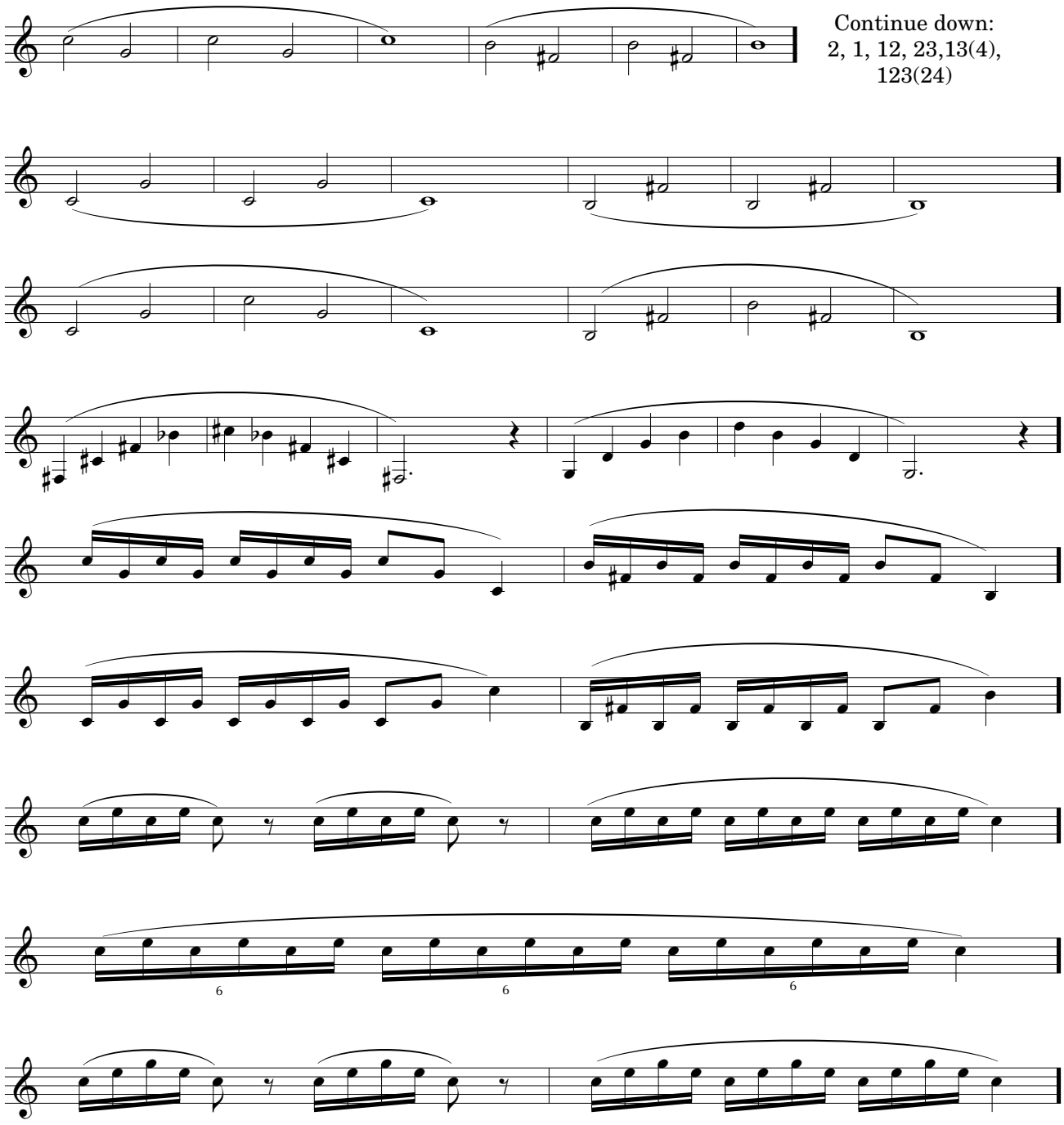
Euphonium Warm-ups

Treble Clef

Long Tones



Flexibility



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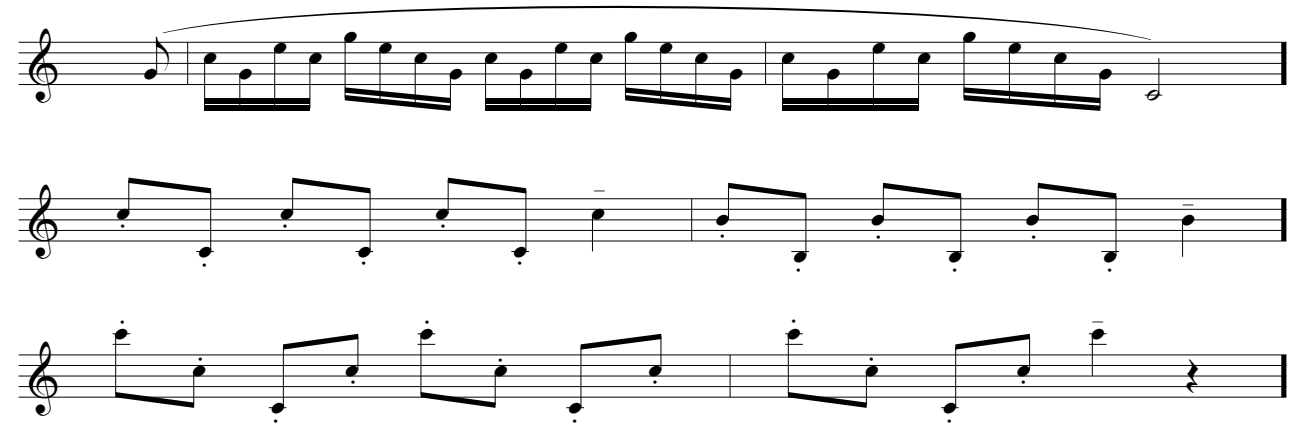
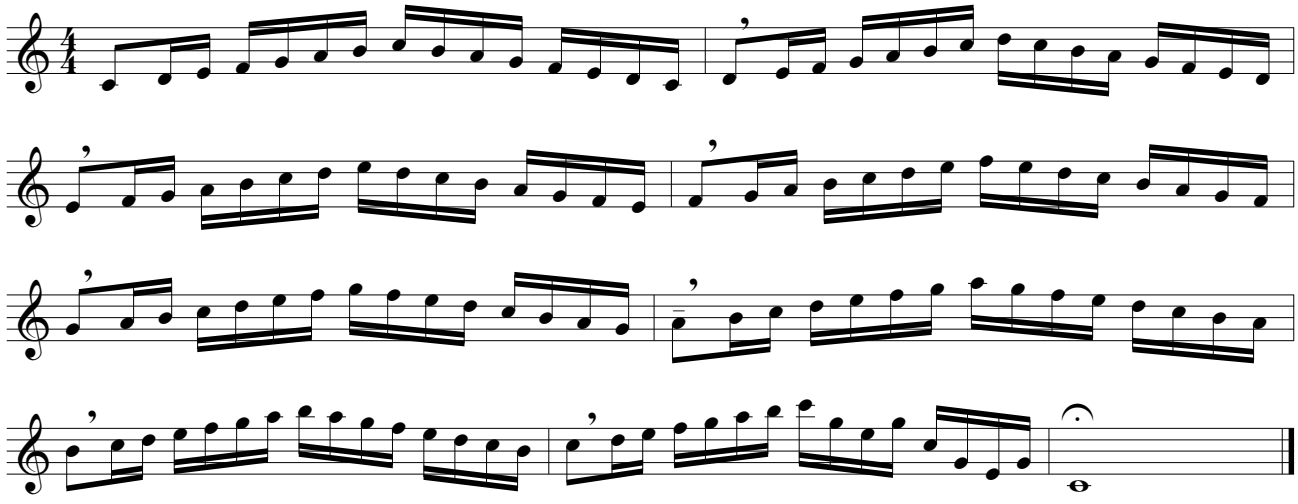


Scale Patterns

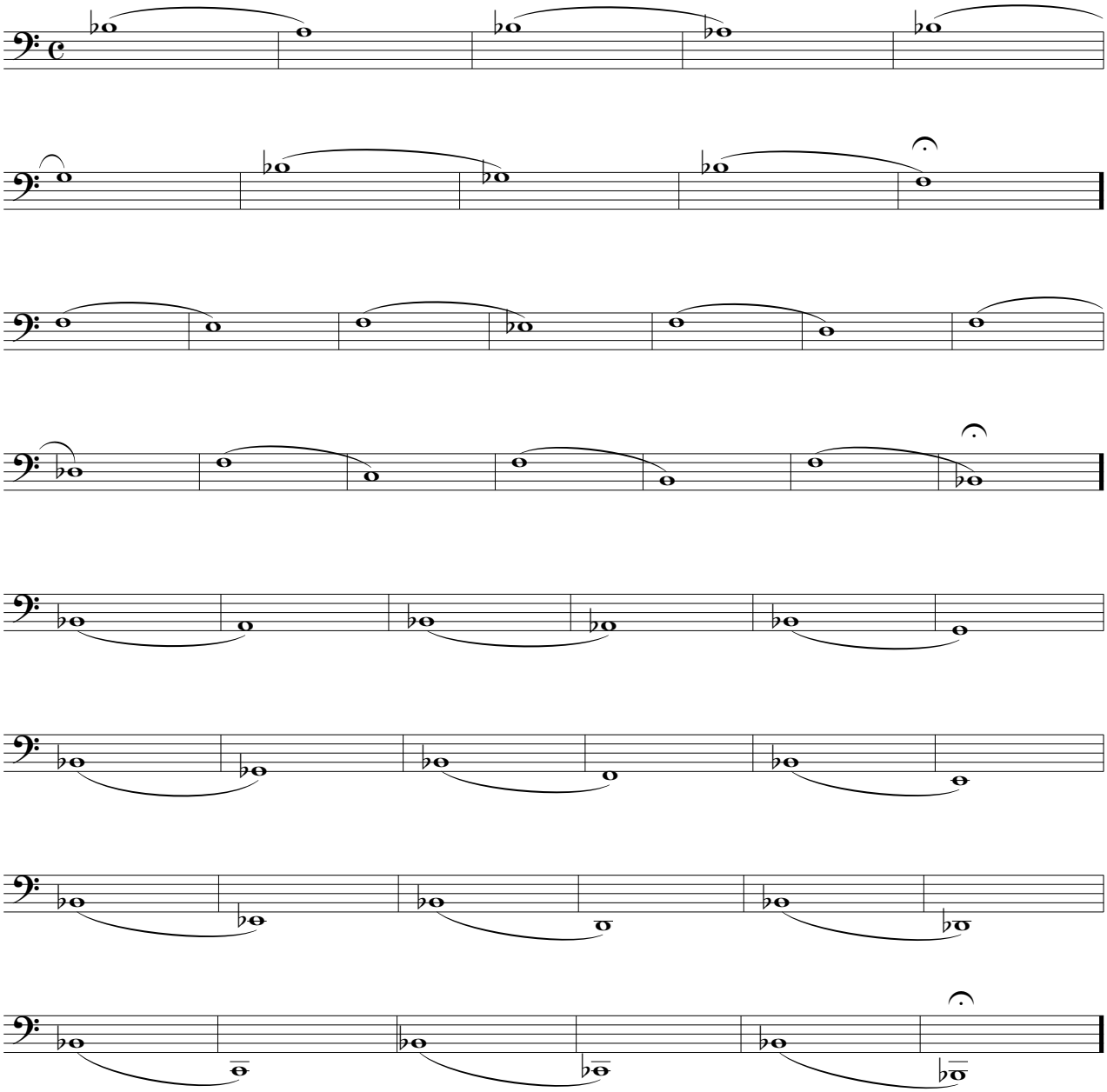


Play both slurred and detached in all keys.

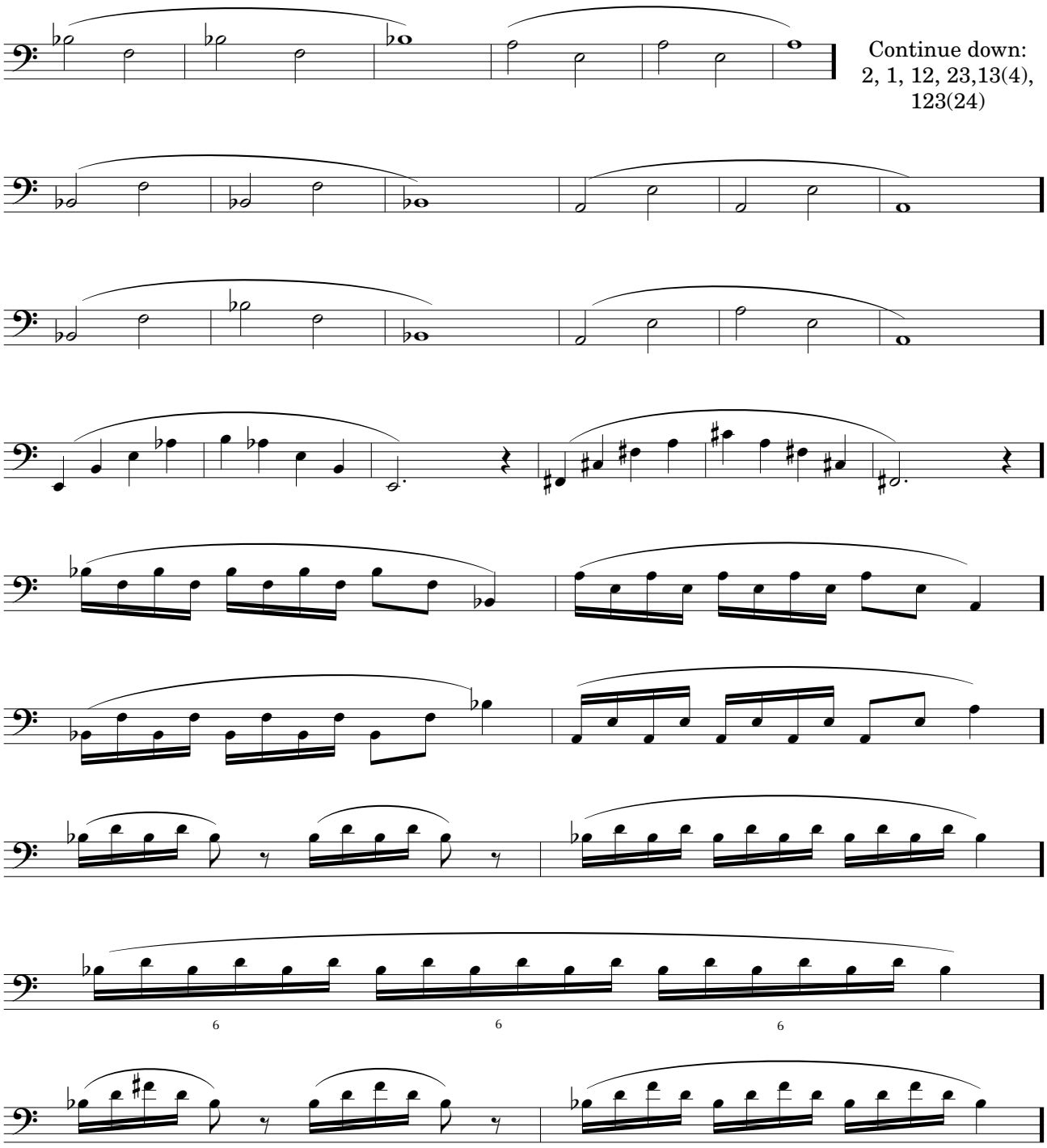
Euphonium Warm-ups

Bass Clef

Long Tones



Flexibility



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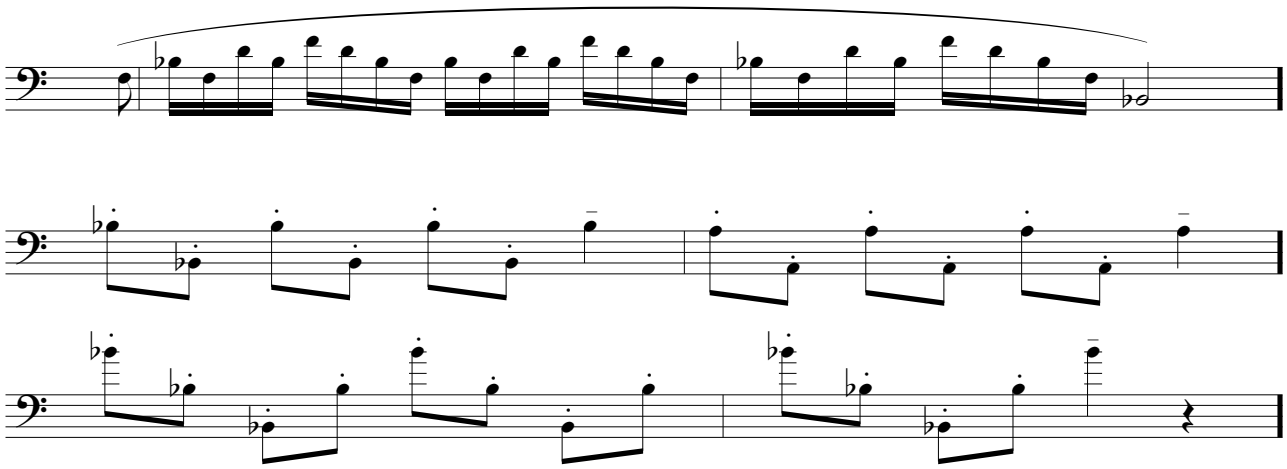
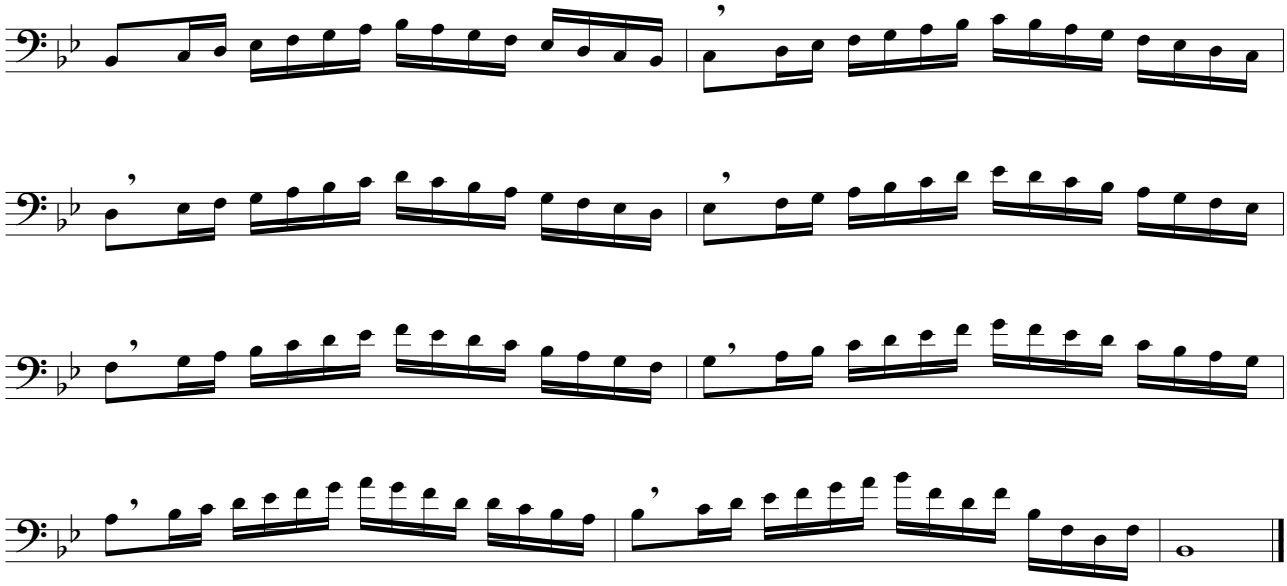


Scale Patterns



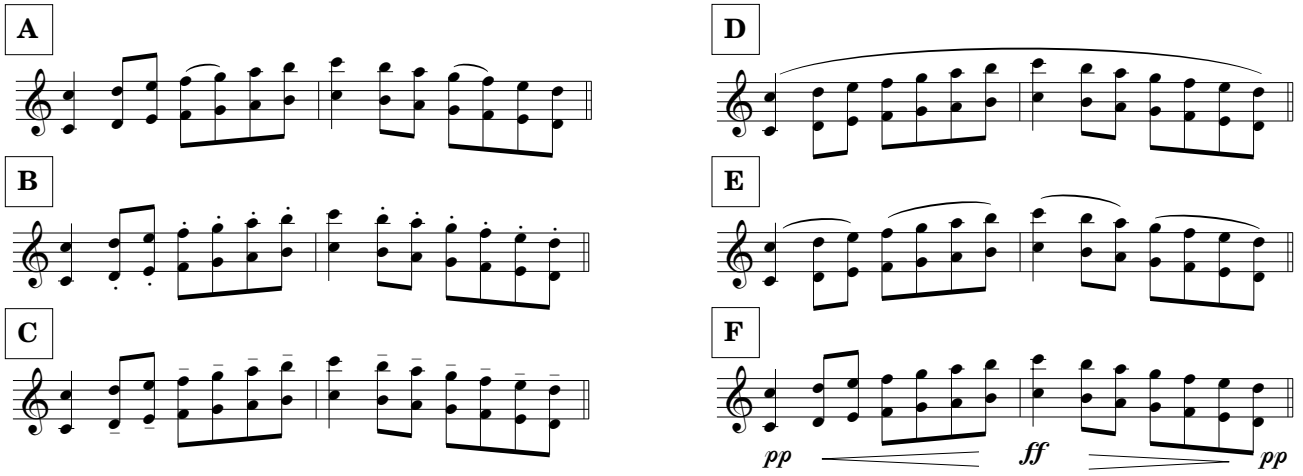
Play both slurred and detached in all keys.

Scale Supplement

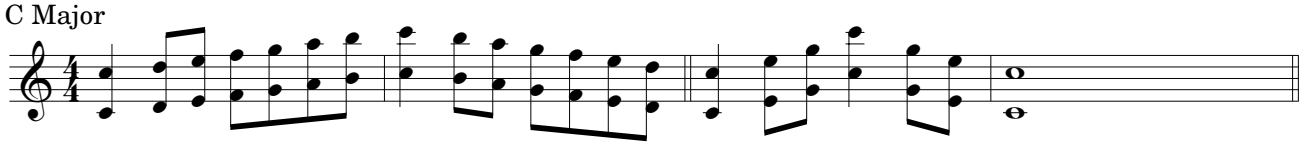
The fifteen major and minor scales make up our musical "ABCs." Just as a person wishing to read learns the alphabet first, a musician cannot expect to master an instrument without first learning the basic set of scales. By diligently practicing the major scales and all three forms of the minor scales, they will become automatic, just like reading the alphabet. This will make playing, especially sight reading, much easier so that the musician can concentrate towards the ultimate goal—making music!

Each scale below should be played slowly at first, ensuring that each note is played correctly. Gradually work for speed, but do not rush. Use a metronome whenever possible to guarantee evenness and a steady tempo. The player should practice difficult scales twice as often as easy ones to develop competence in all keys. As skills increase, change rhythmic patterns and increase tempos. Advanced players can still use scales to work on intonation, technique, range, and dynamics.

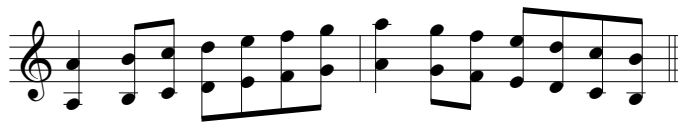
Use the following patterns one at a time or in combination to get even more benefit from scale practice:



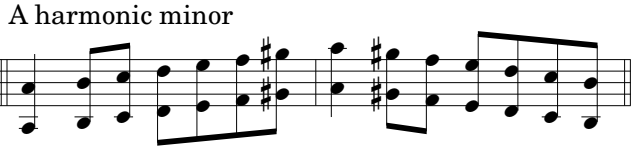
C Major



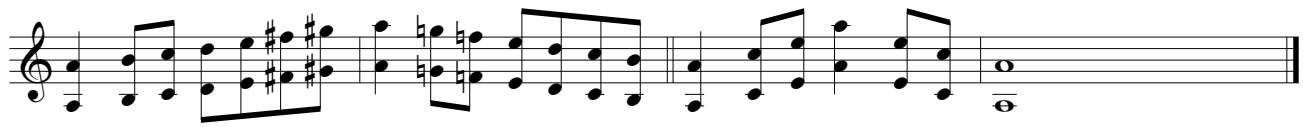
A natural minor



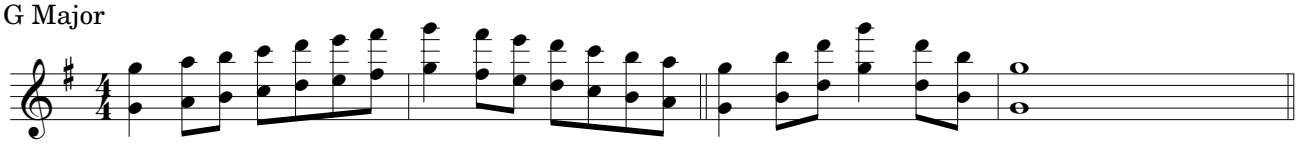
A harmonic minor



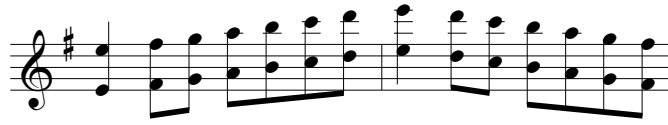
A melodic minor



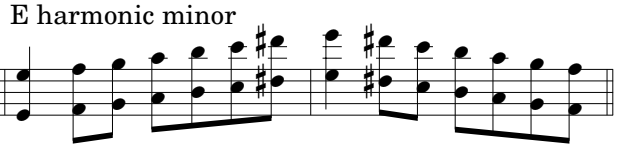
G Major



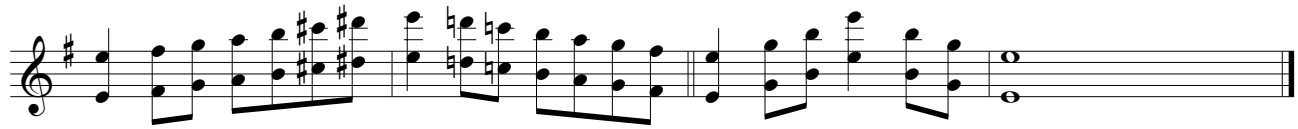
E natural minor



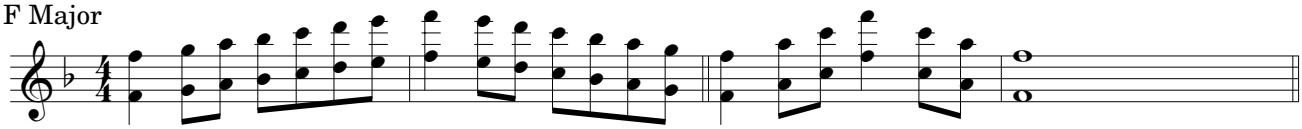
E harmonic minor



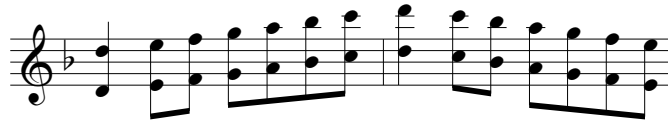
E melodic minor



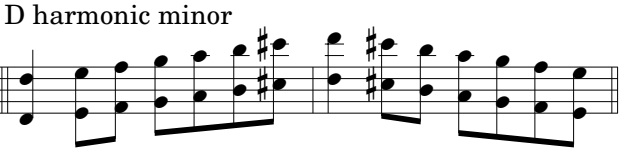
F Major



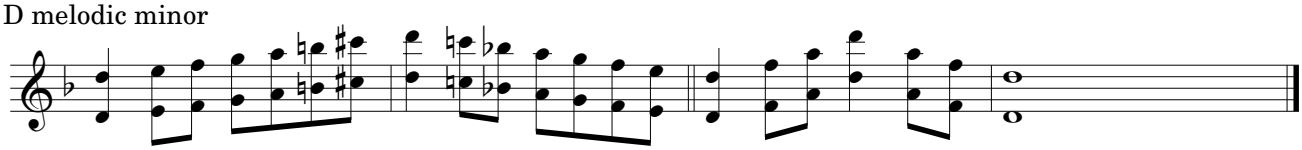
D natural minor



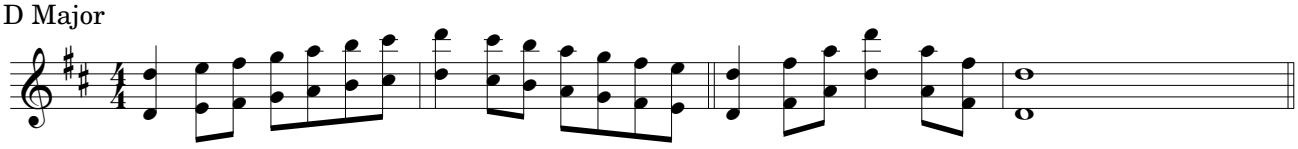
D harmonic minor



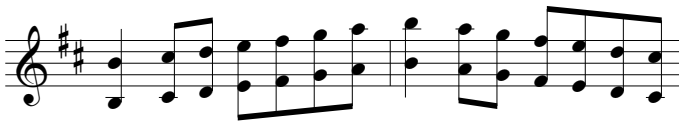
D melodic minor



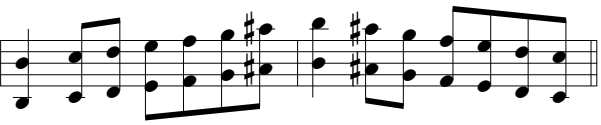
D Major



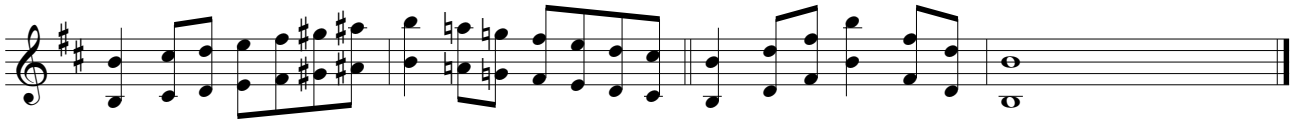
B natural minor



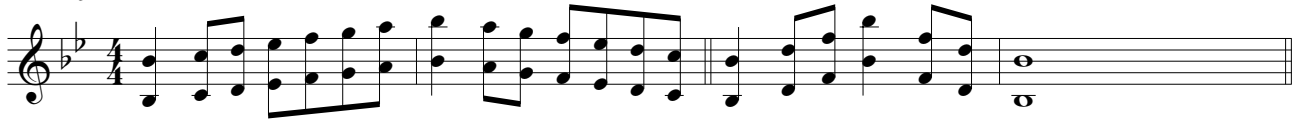
B harmonic minor



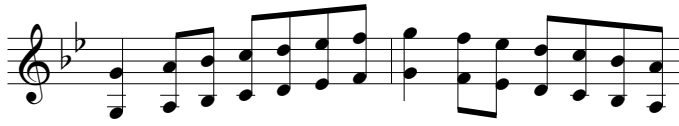
B melodic minor



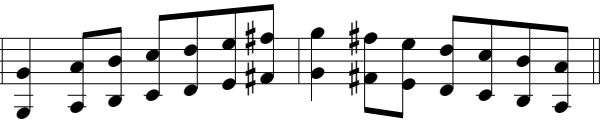
Bb Major



G natural minor



G harmonic minor



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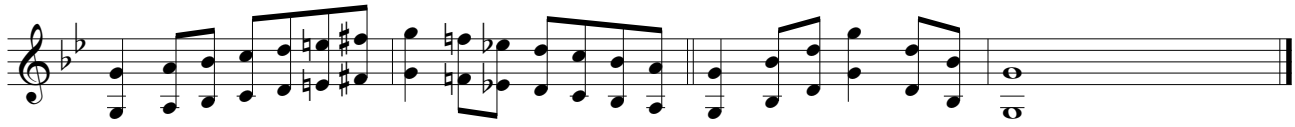
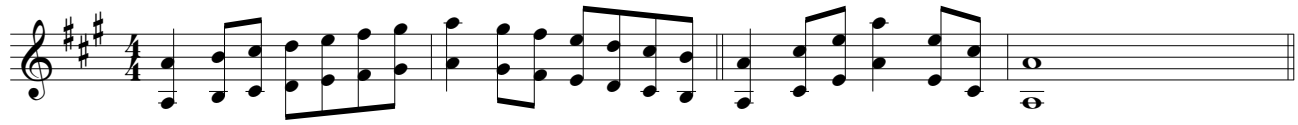
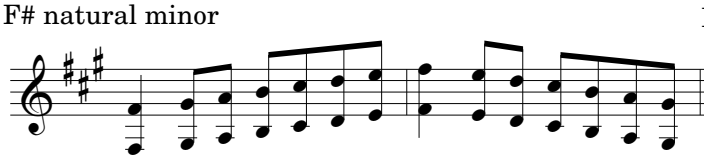


A Major



F# natural minor



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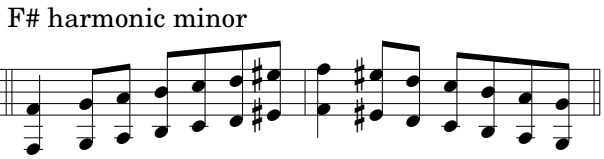

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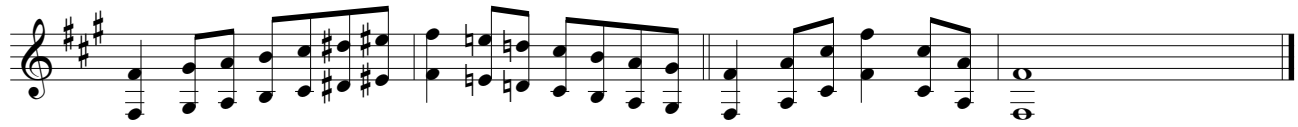
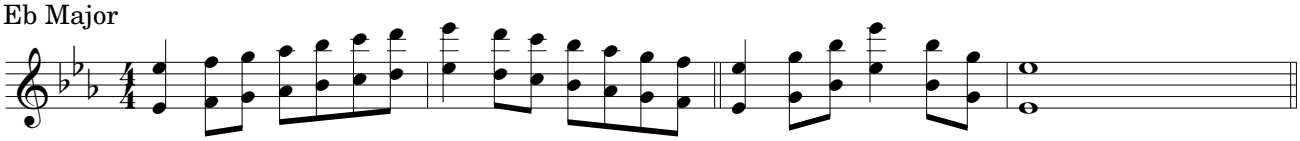
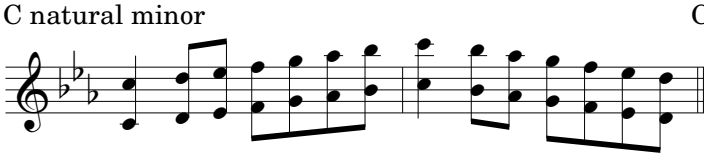


Eb Major



C natural minor



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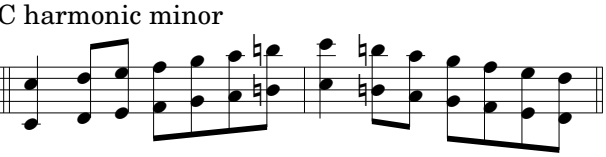

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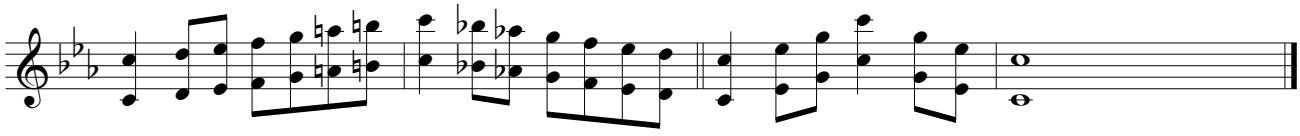
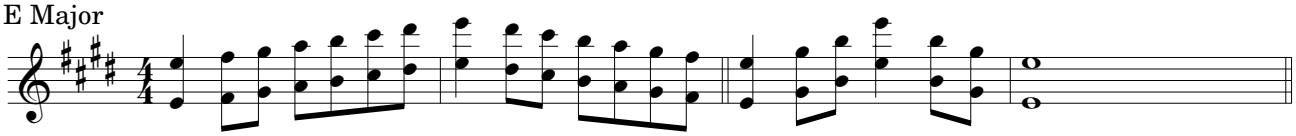


E Major



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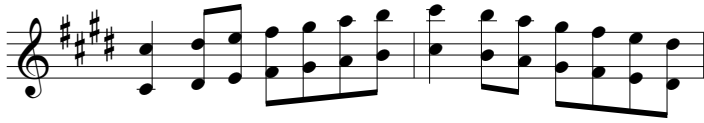

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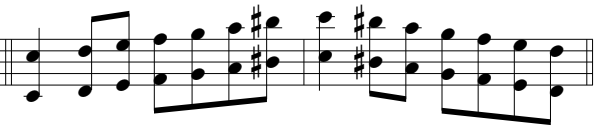

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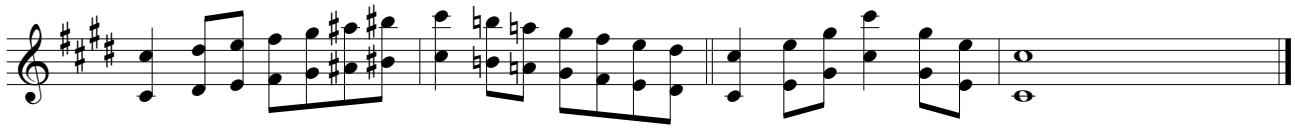
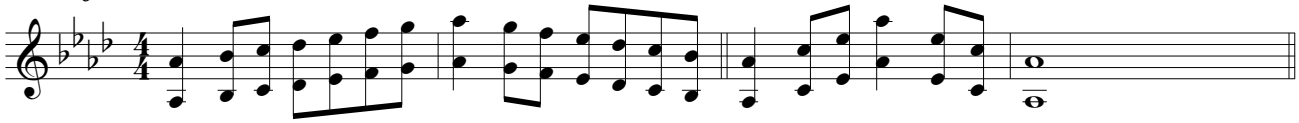
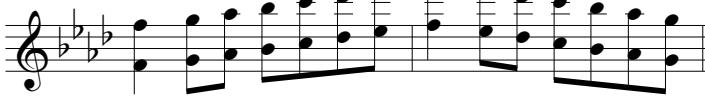


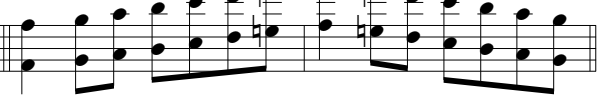
Ab Major



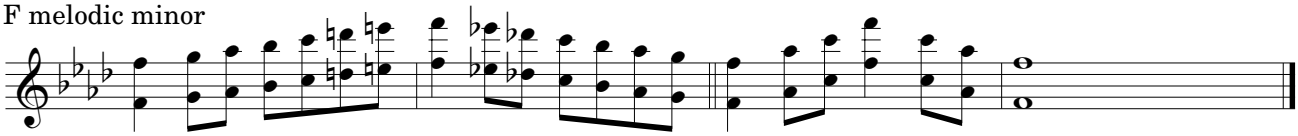
F natural minor



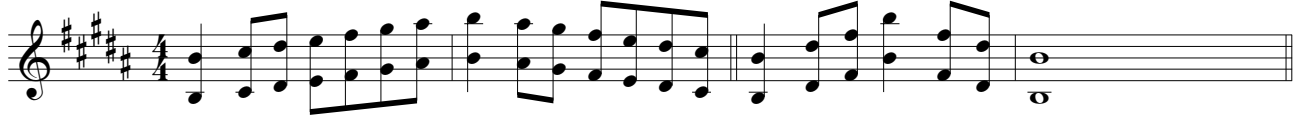
F harmonic minor



F melodic minor



B Major



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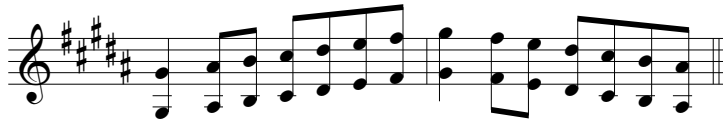

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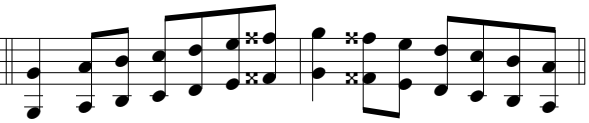

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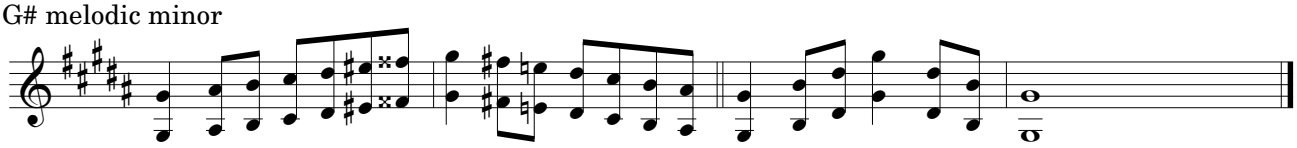
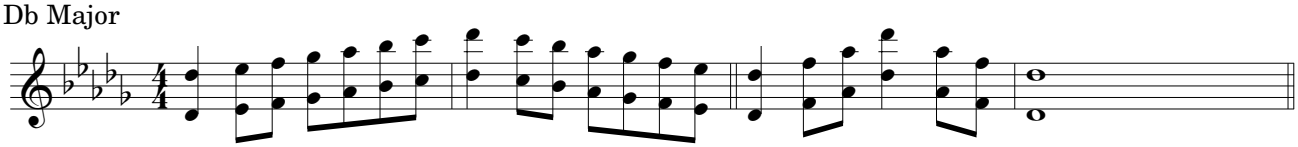
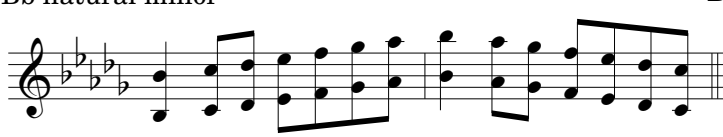


Db Major



Bb natural minor



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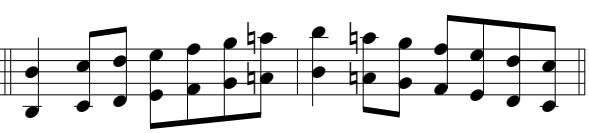

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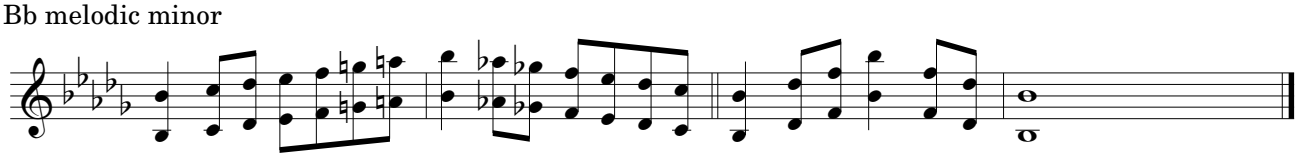
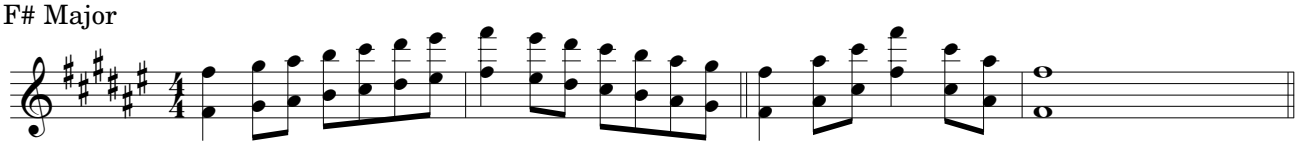


F# Major



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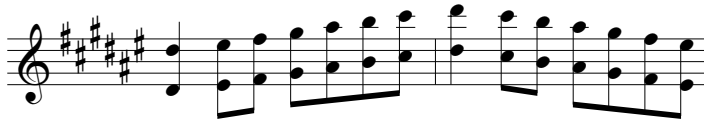

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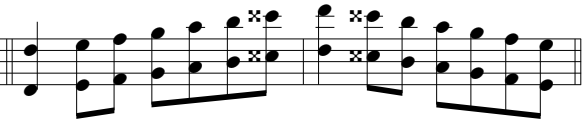

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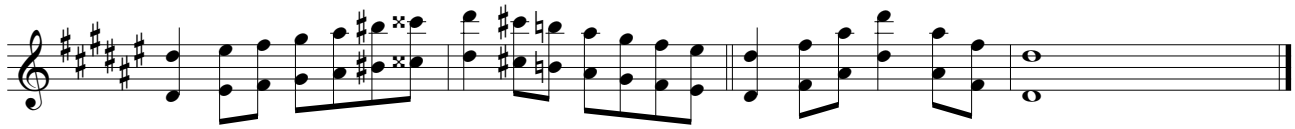
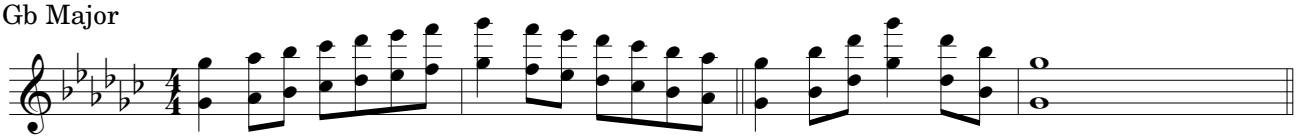
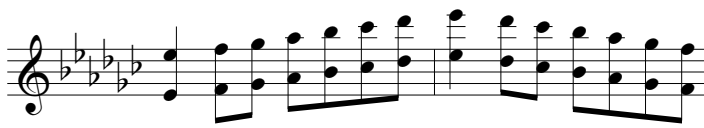


Gb Major



Eb natural minor



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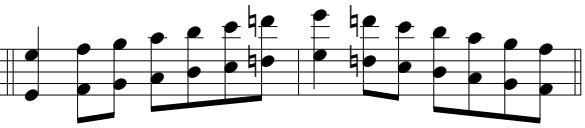
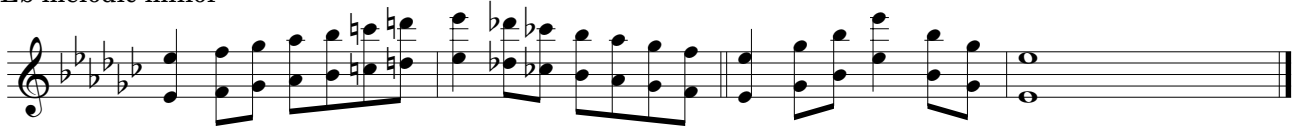


Eb melodic minor



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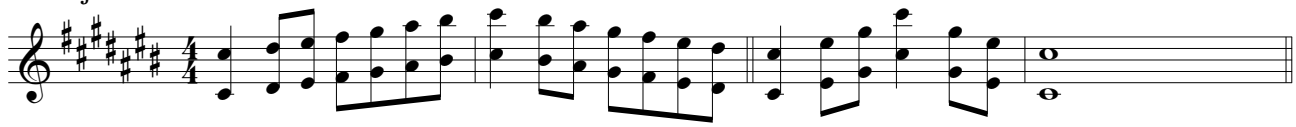
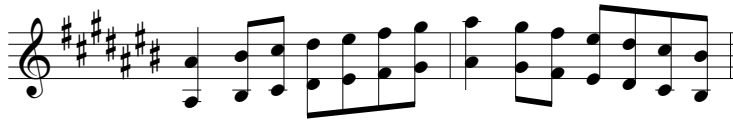


A# natural minor



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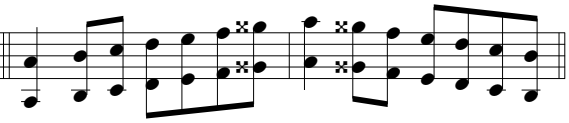

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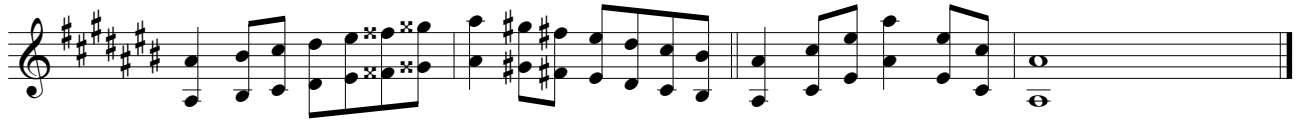
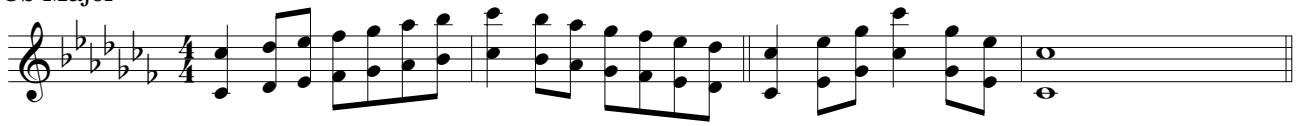
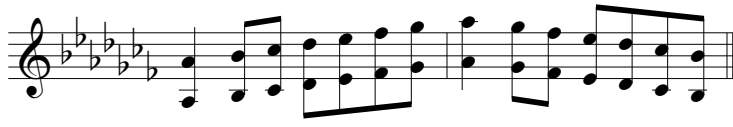


Cb Major



Ab natural minor



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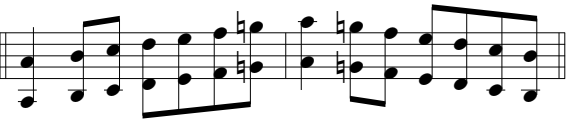

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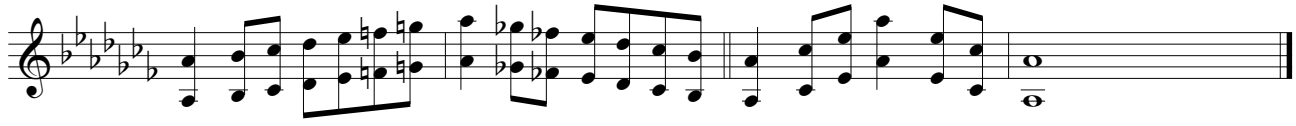
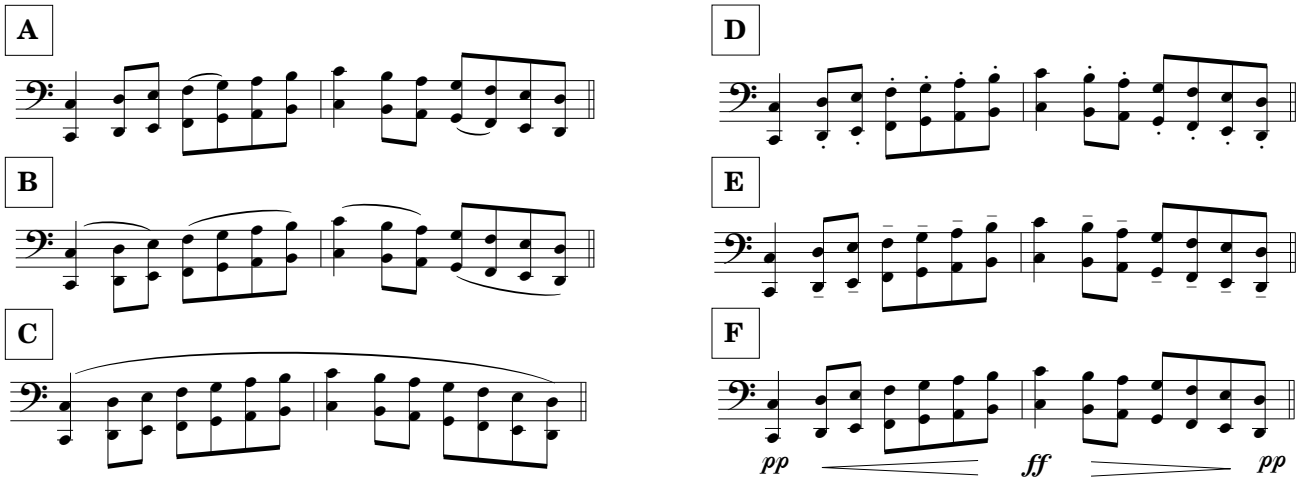


Scale Supplement

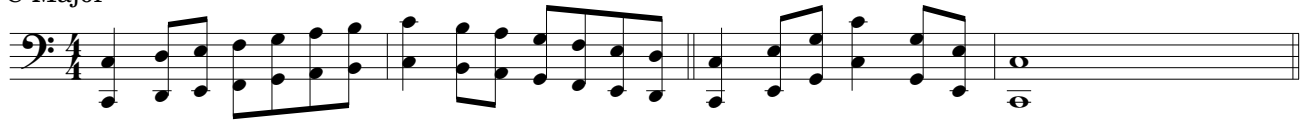
The fifteen major and minor scales make up our musical "ABCs." Just as a person wishing to read learns the alphabet first, a musician cannot expect to master an instrument without first learning the basic set of scales. By diligently practicing the major scales and all three forms of the minor scales, they will become automatic, just like reading the alphabet. This will make playing, especially sight reading, much easier so that the musician can concentrate towards the ultimate goal—making music!

Each scale below should be played slowly at first, ensuring that each note is played correctly. Gradually work for speed, but do not rush. Use a metronome whenever possible to guarantee evenness and a steady tempo. The player should practice difficult scales twice as often as easy ones to develop competence in all keys. As skills increase, change rhythmic patterns and increase tempos. Advanced players can still use scales to work on intonation, technique, range, and dynamics.

Use the following patterns one at a time or in combination to get even more benefit from scale practice:



C Major



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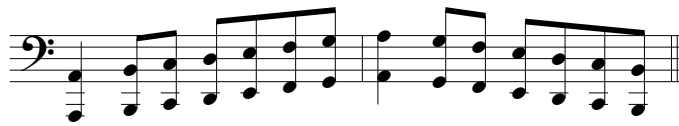
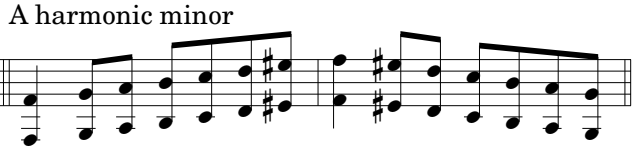
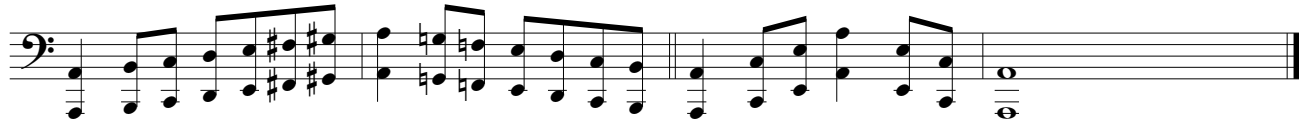


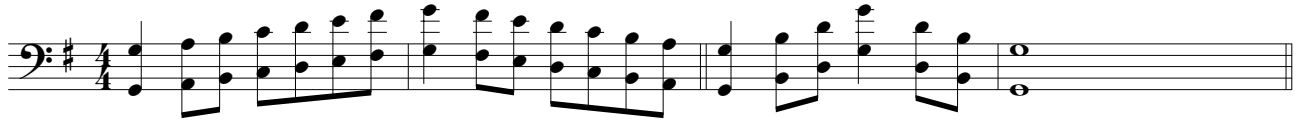
A harmonic minor



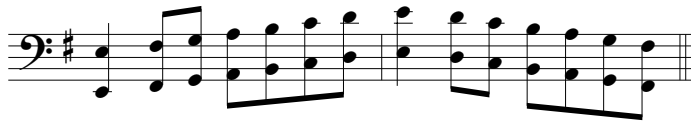
A melodic minor



G Major



E natural minor



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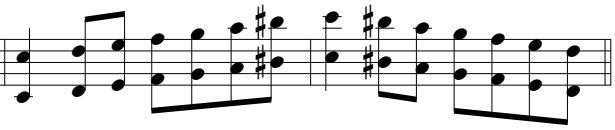
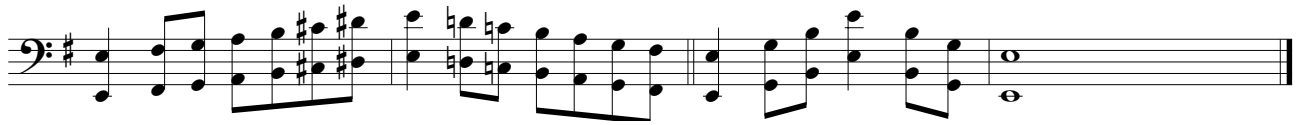
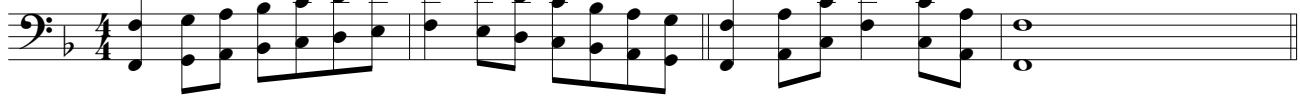


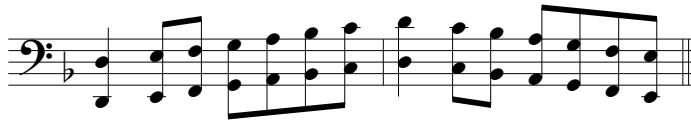
E melodic minor



F Major



D natural minor



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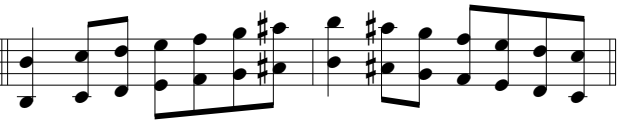
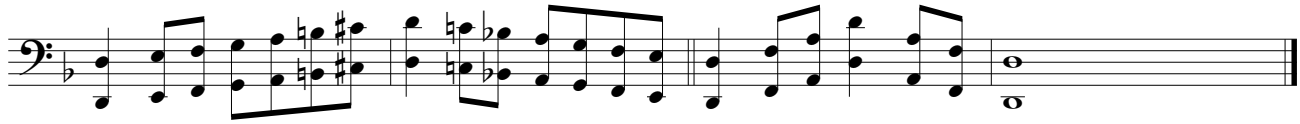
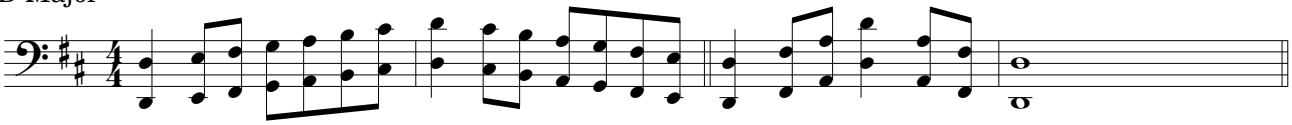


D melodic minor



D Major



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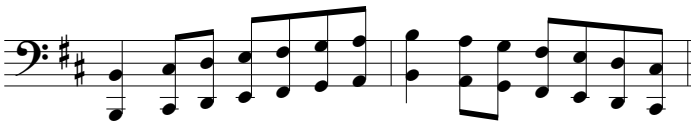
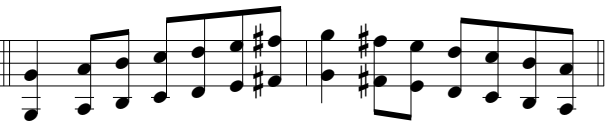
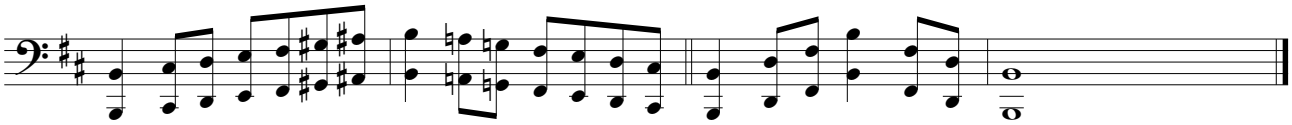


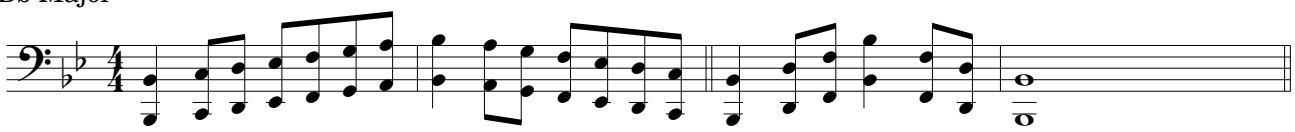
B harmonic minor



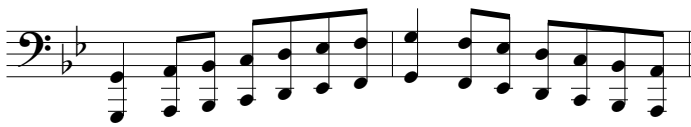
B melodic minor



Bb Major



G natural minor



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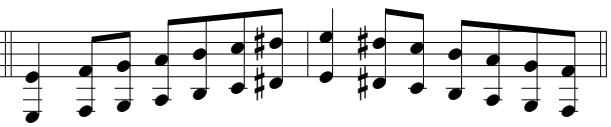
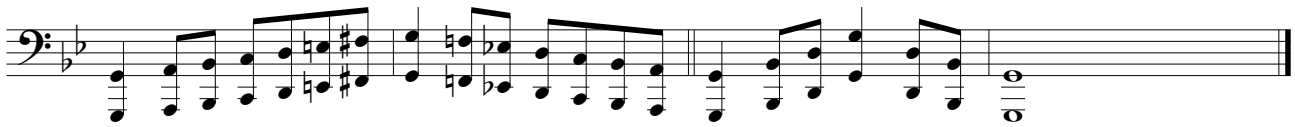
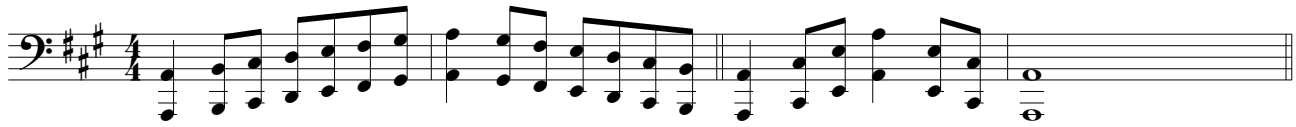


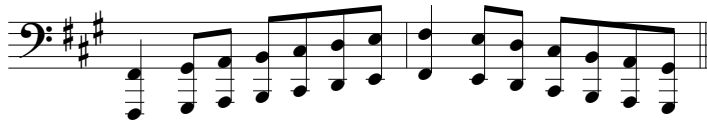
G melodic minor



A Major



F# natural minor



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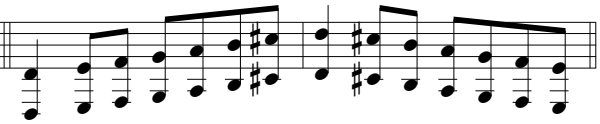

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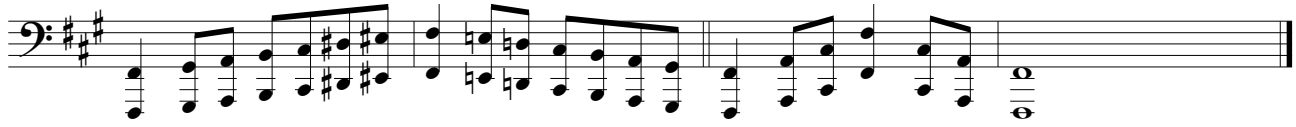
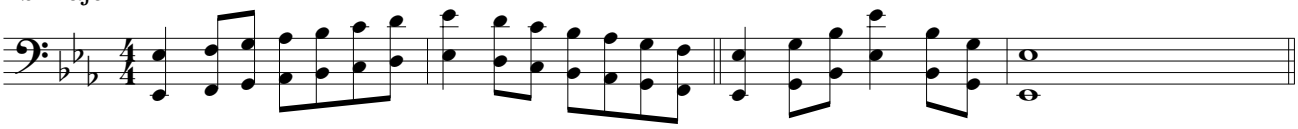
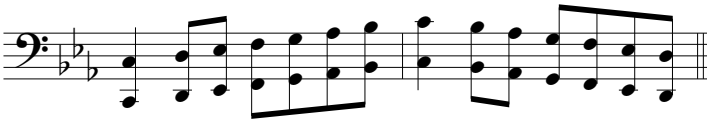


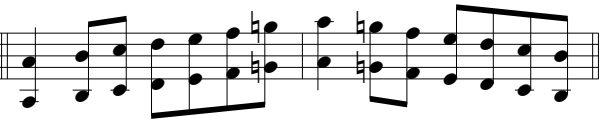
Eb Major



C natural minor



C harmonic minor



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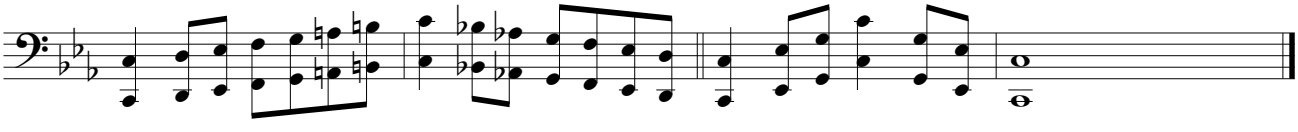
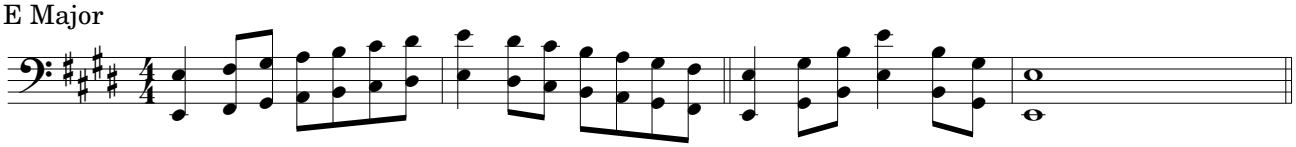
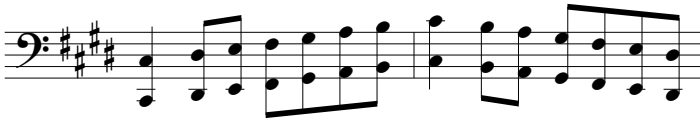


E Major



C# natural minor



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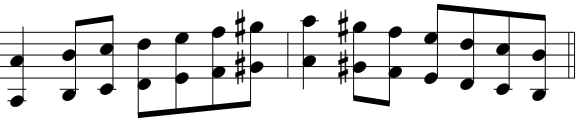

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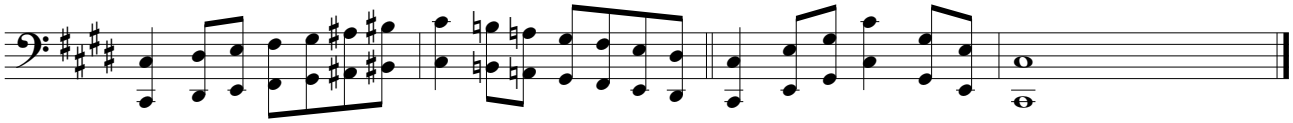
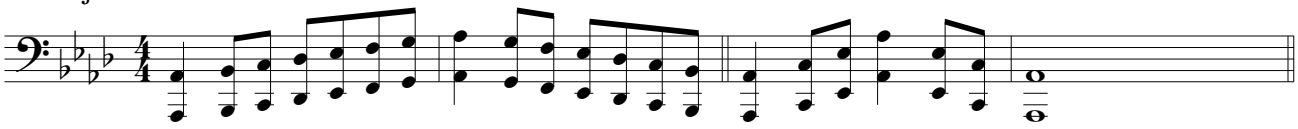
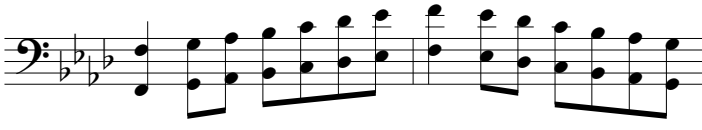


Ab Major



F natural minor



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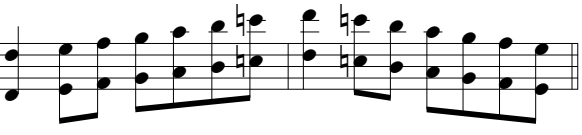
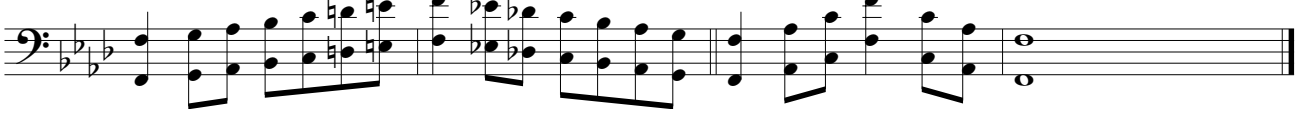
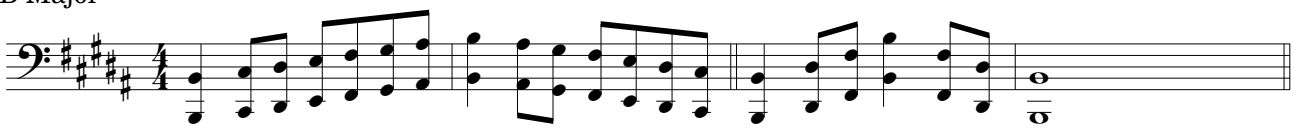


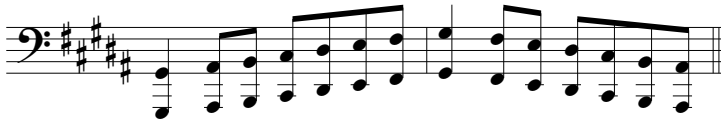
F melodic minor



B Major



G# natural minor



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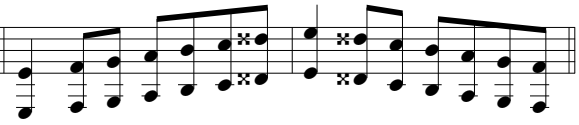

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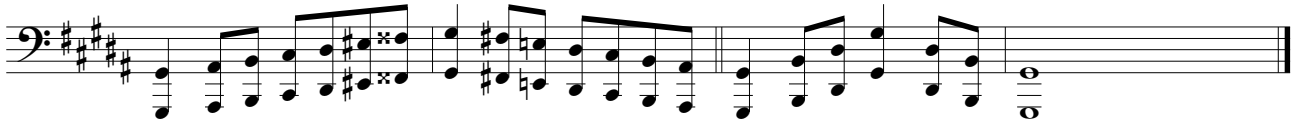
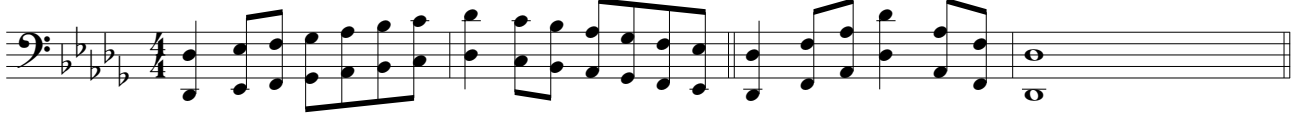
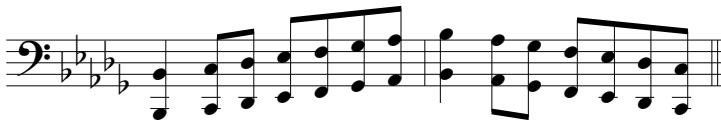


Db Major



Bb natural minor



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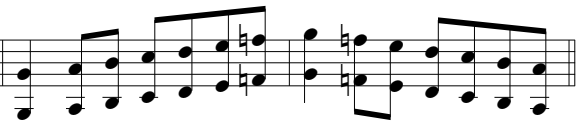
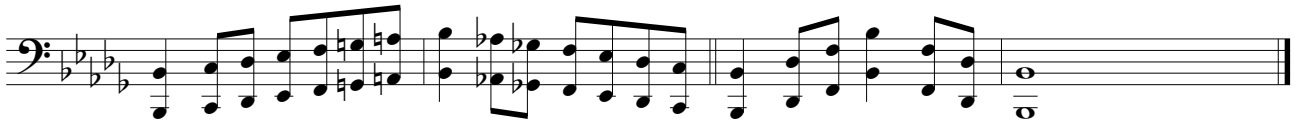
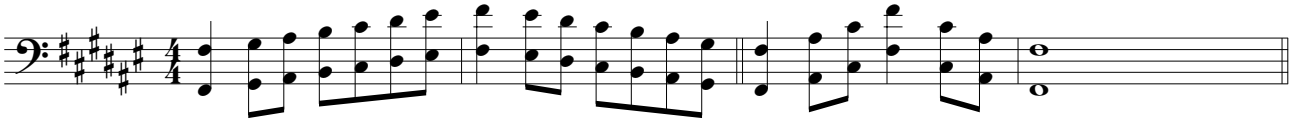


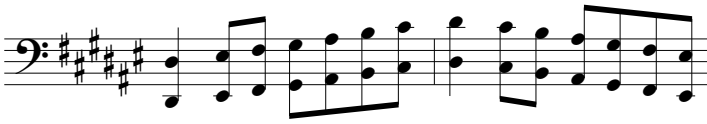
Bb melodic minor



F# Major



D# natural minor



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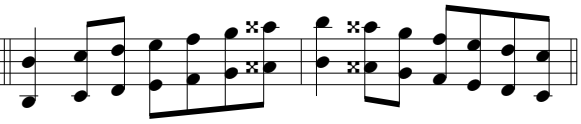

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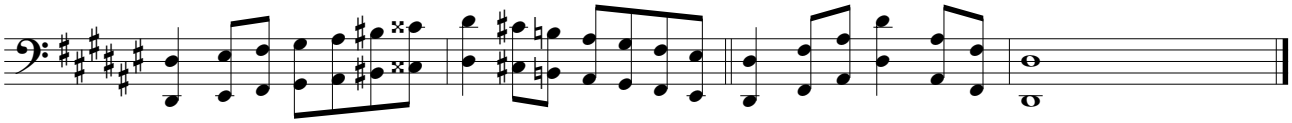

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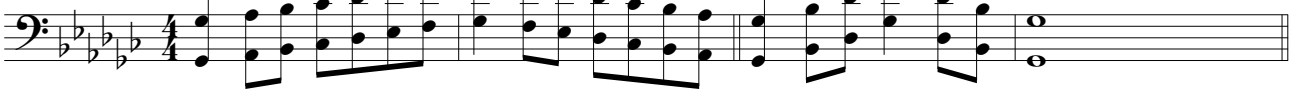
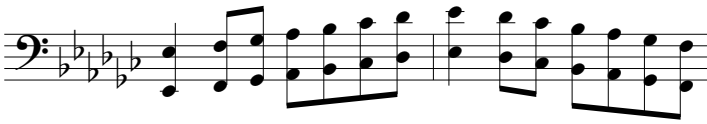


Eb natural minor



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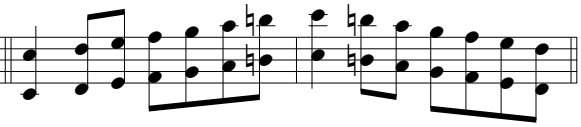

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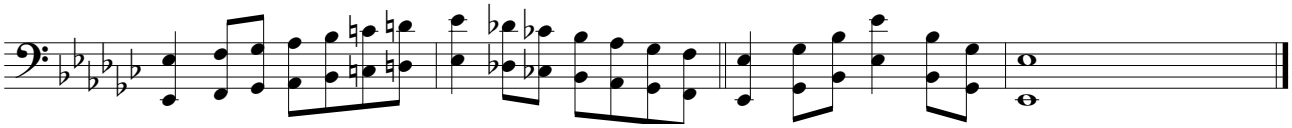
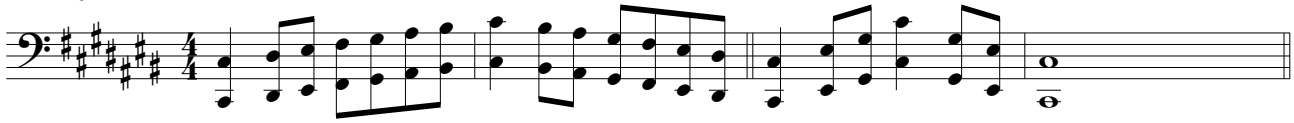
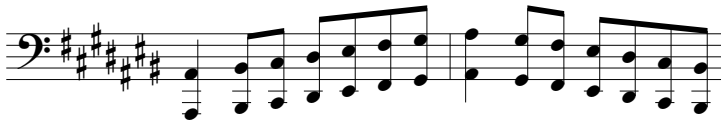


C# Major



A# natural minor



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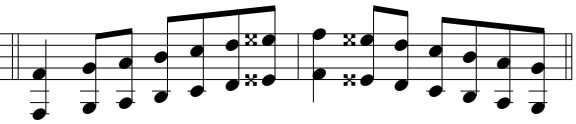

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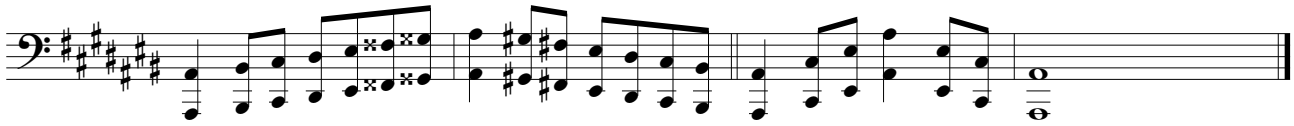
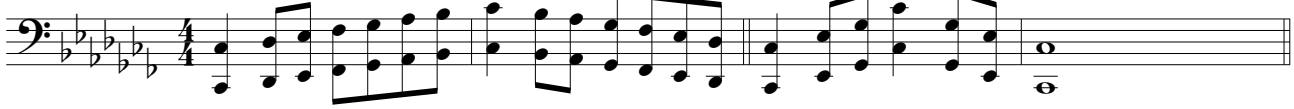
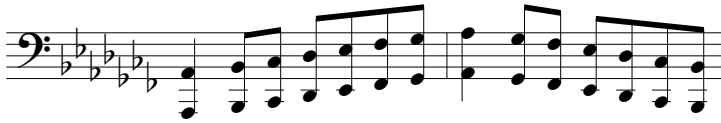


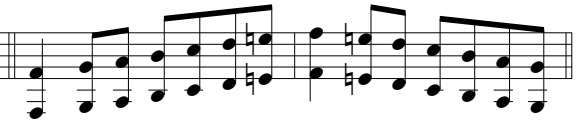
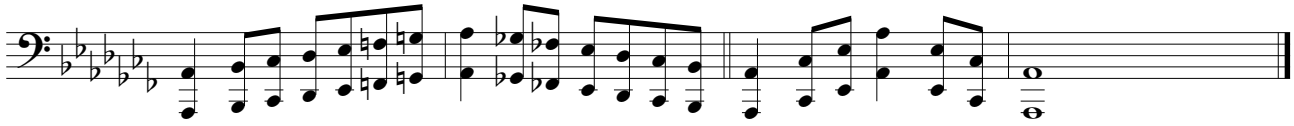
Cb Major



Ab natural minor



Ab harmonic minor



Ab melodic minor