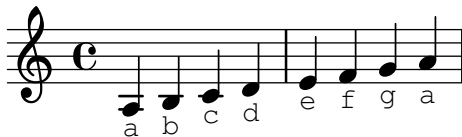# LilyPond

LilyPond is a musical score typesetter, a program to generate beautiful scores from textual input files. It's free software and available on all major desktop operating systems, and you can also try it out online at lilybin.com.

Pitches

The pitch of a note is denoted by a single letter from A to G.

Usually, relative mode is used so that the octave doesn't "jump around"
(\relative a { a b c d e f g a }).

Durations

Durations are specified with a numerical suffix (4 = quarter note etc.), optionally
followed by periods for dotted notes. Omitting the duration reuses the last note's
duration.


```
\relative c' {
  c4. c16 c c4. c16 c |
  c4 c c8 c \tuplet 3/2 { c8 c c } |
}
```

Pitches

Change the octave of a note by appending commas (lower) or apostrophes (higher).


```
\relative c' {
  \time 12/8
  g'4. g8 c, g' g2. |
  c4. g c,2. |
  g'4. g8 c, g' g2. |
  e'8 r d d4.~ d2. |
}
```

Pitches

Raise or lower the pitch by a semitone with the suffix "-is" or "-es".



```
\relative c' {
  \key e \minor
  \time 3/8
  e8. g16 fis8 | es4 f8 |
  b,4.~ | b4 r8 |
}
```

LilyPond automatically adds accidentals and naturals as needed.

Tweaks

LilyPond is almost infinitely configurable. All graphical objects you see on the screen have properties that you can override, either for just the next object or for the rest of the score. Other properties of the score (not directly connected to individual grobs) are also tweakable.
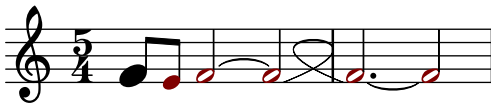

```
\relative c' {
  \time 5/4
  \tweak font-size 4 f8
  \override NoteHead.color = #darkred e
  \once \override Tie.direction = #UP f2~
  \shape #'((0 . 0) (10 . 5) (-10 . 5) (0 . 0)) Tie f~ |
  f2.~ f2 |
}
```

Scheme

Internally, much of LilyPond is backed by Scheme, a dialect of the Lisp programming language. If the overrides are not enough for you, you can also mess with the score through Scheme programming.
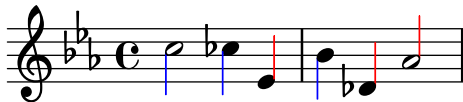

```
\relative c' {
  \override Stem.color = #(lambda (grob)
    (if (= UP
          (ly:grob-property grob 'direction))
        red
        blue))
  \key c \minor
  c'2 ces4 es, | bes' des, as'2 |
}
```

More information

- ▶ LilyPond Learning Manual
- ▶ LilyPond Notation Manual
- ▶ LilyPond Snippet Repository