MIDI recording and quantize in Logic Pro

Music Production - Assignment wave 2

Claude Falguière

Introduction

My name is Claude. I'm French, English is not my natural langage. I'm a professional computer scientist and I'am a complete beginner in music production and a new user of Logic Pro X

This presentation is about

* Add a software instrument and record MIDI and quantize in your DAW. Including preparing the track(s), adding the instrument, setting the click and countoff, and recording efficiently.

Prepare the project

Pre-production

Well, I'am not a musician. The only piece of music I can play is «Au clair de la lune» (By the light of moon) a French nursery rhyme.
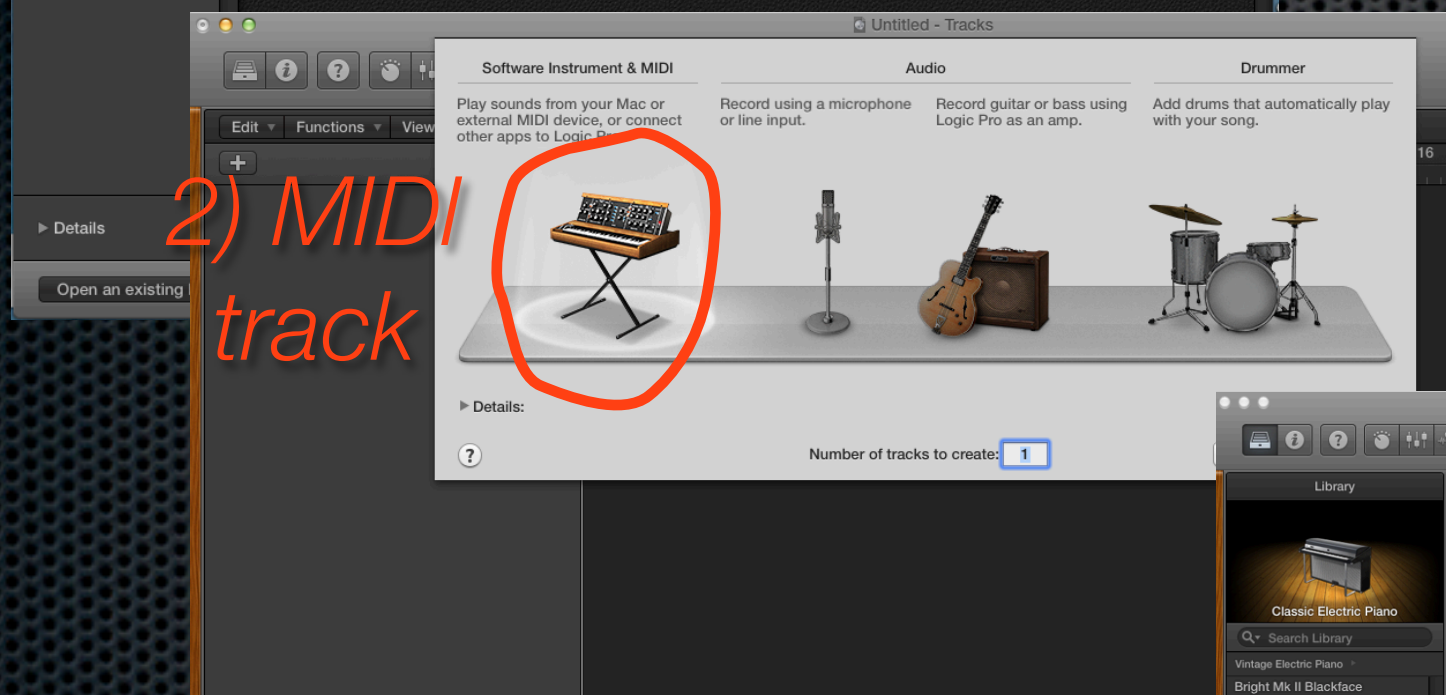
I've decided to record two first bars of this piece using a MIDI piano and the virtual keyboard provided by Logic Pro.

Not sure, it will be at the top of the charts next week, but I'll presumably have a lot of default to fix.

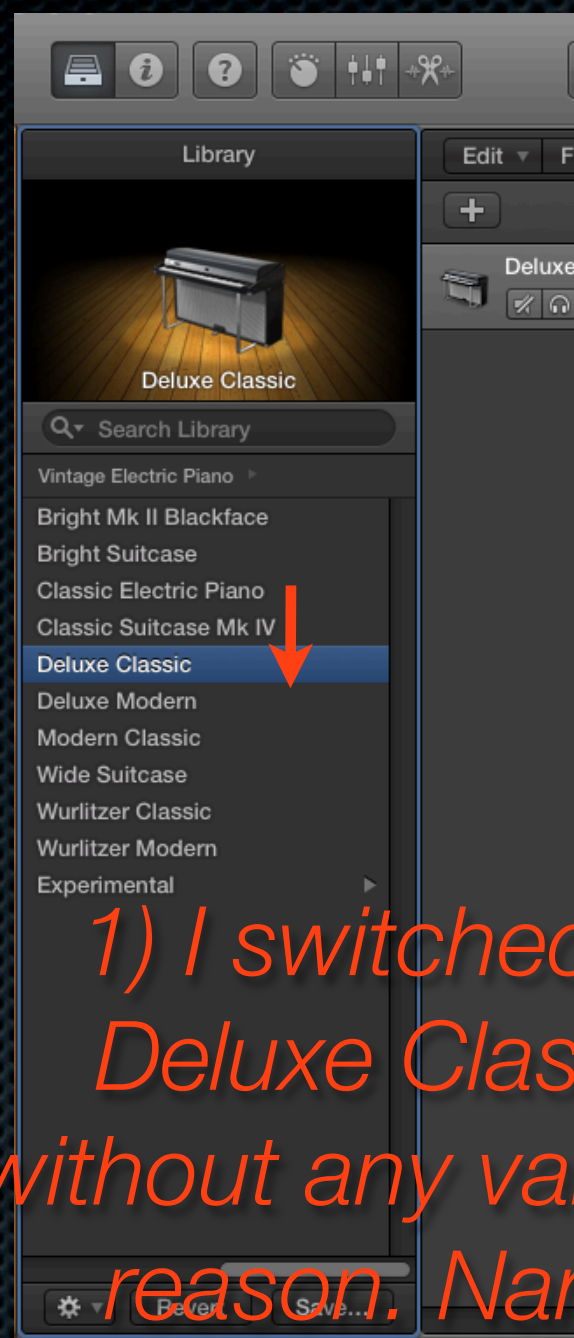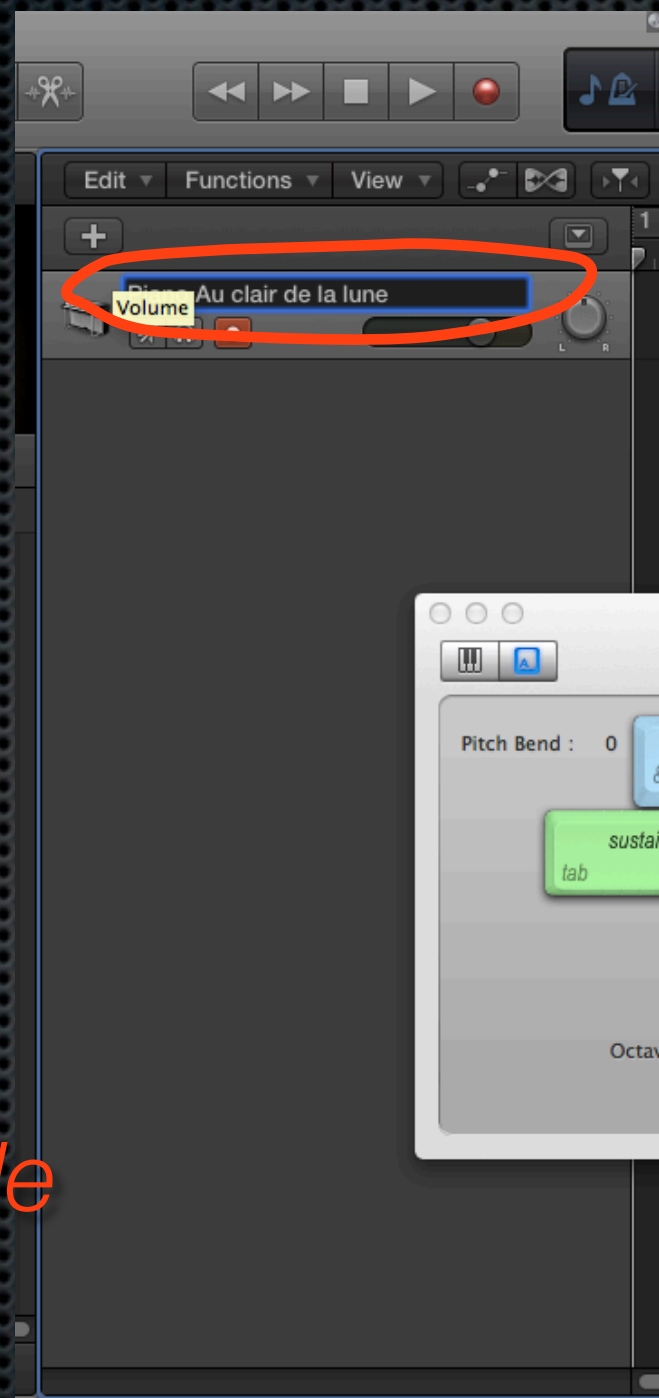# Create the project

1) Empty Project

2) MIDI track

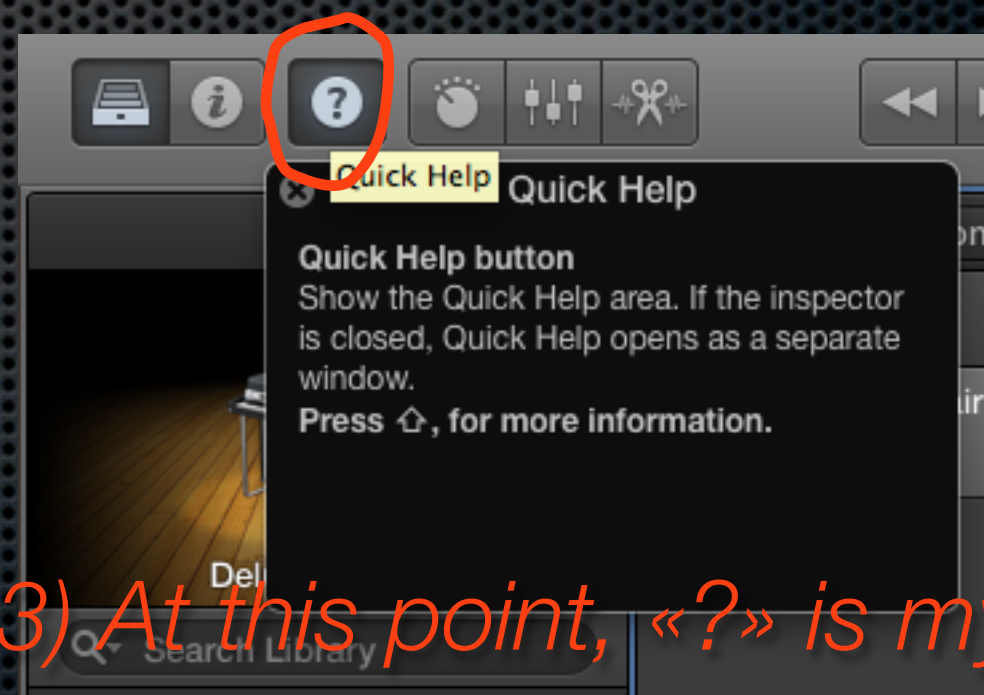*3) a project with the wonderful virtual keyboard*

Add a MIDI instrument

Choose an instrument

2) track name changed to be Deluxe Classic. I changed it to be «piano Au clair de la lune»

1) I switched to Deluxe Classic without any valuable reason. Name sounds cool
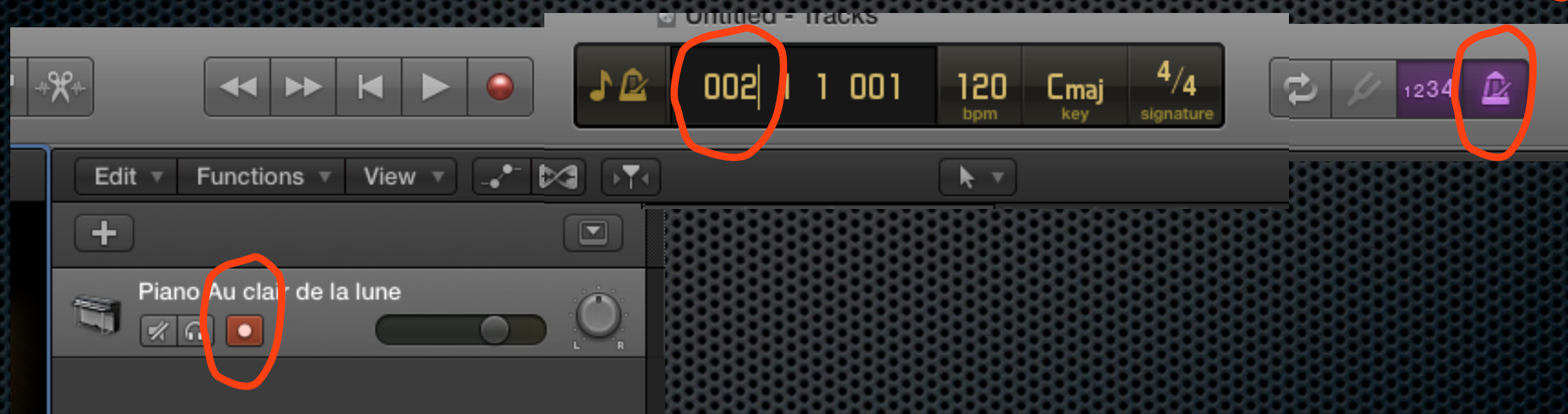
3) At this point, «?» is my preferred menu. It switches on tips on other buttons.

Record

Checklist

3) edited the countoff by clicking within the area
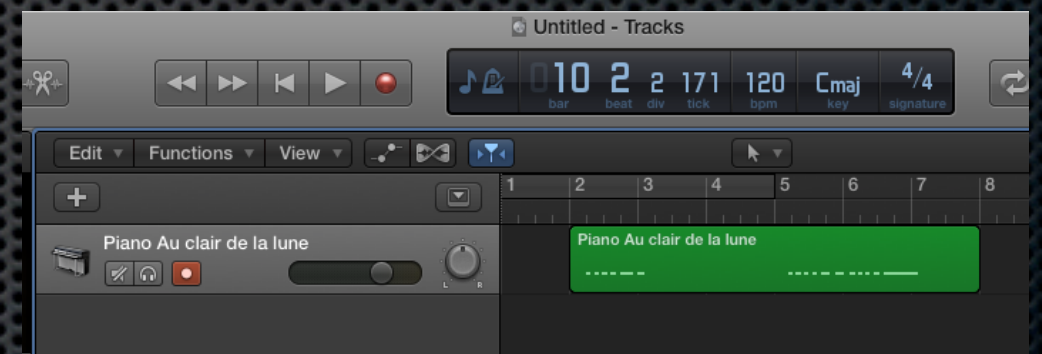
2) click is on

1) record is enabled (by default)

Record

4) presses the red ball and hush, now recording until I push the square button
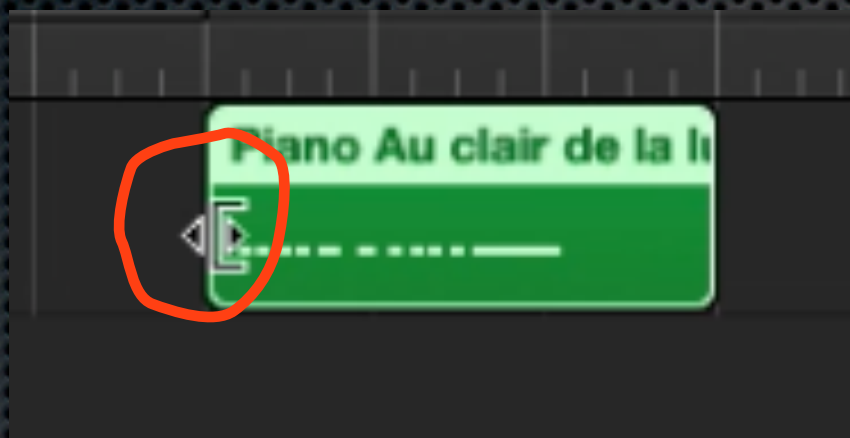
5) ... and this is what I got

Did I tell you that I'am really bad at playing piano ?
I went wrong and recorded the song twice.
I hope the music producer will be able to fix it ...

Post Production

Clip the acceptable take

*1) I first clipped the
region to the 2nd take
from bars 5 to 7*

*The cursor changes to a <[> symbol.
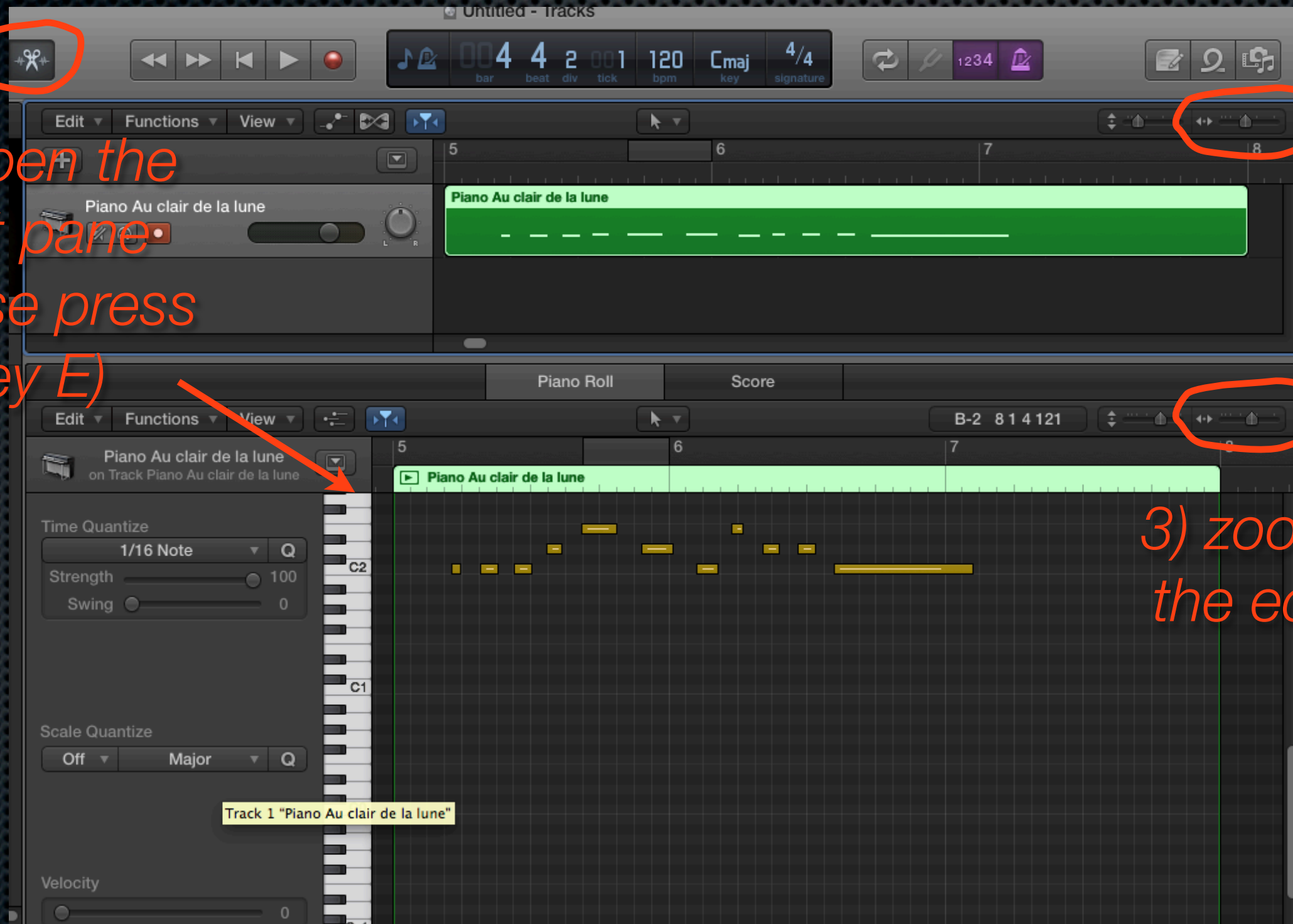If you wait a while, a tip shows the
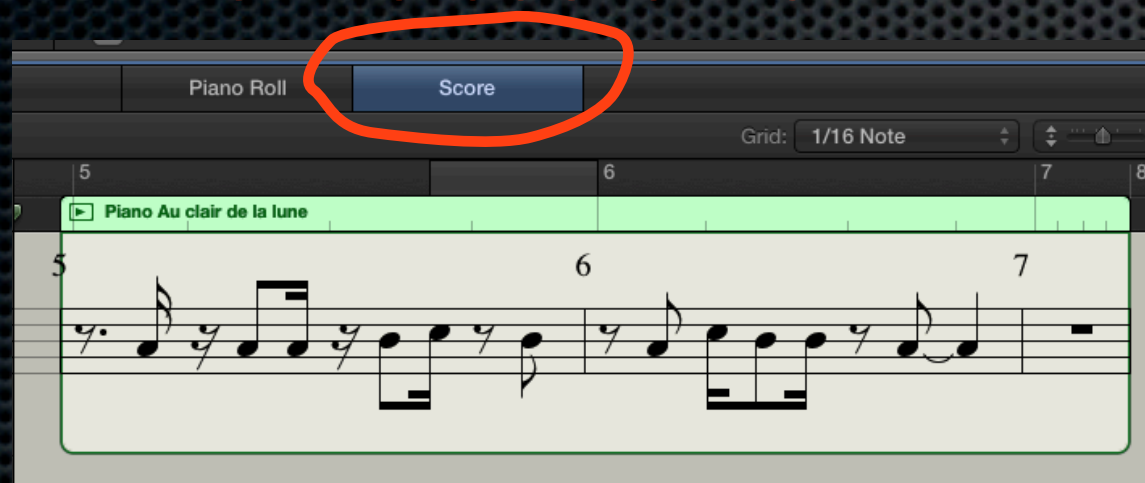position and length*

Edit the region

1) zoom in

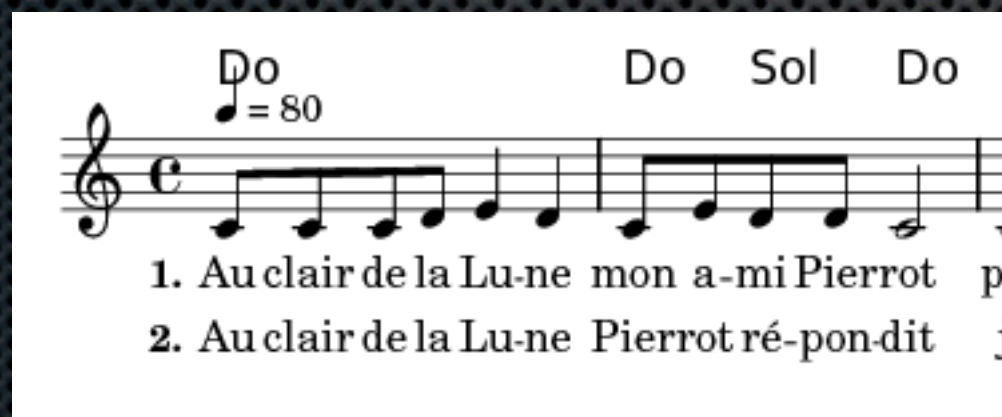2) open the edit pane (or use press key E)

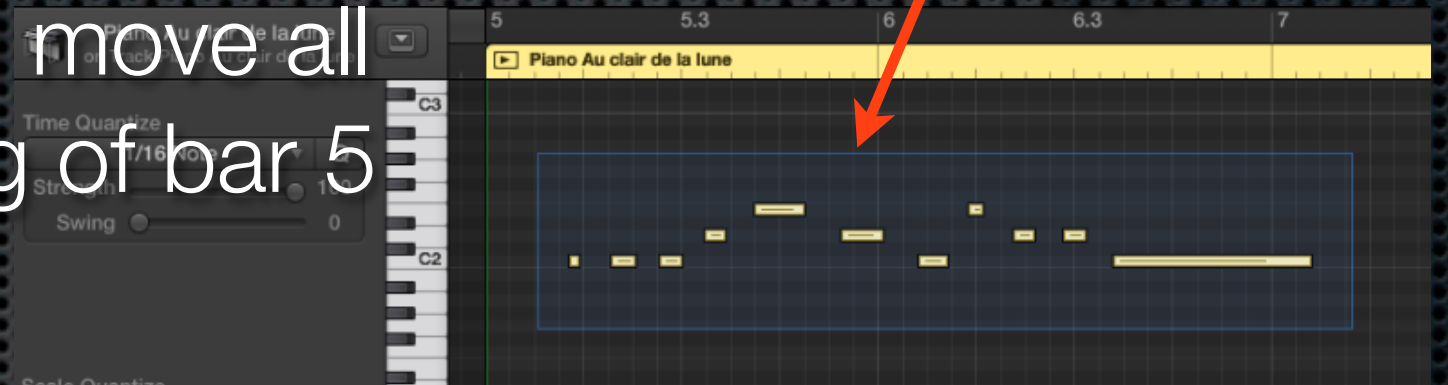3) zoom in the editor

Check

This is what I recorded

and this is what I expect ...

Quantizing is pointless
at this step as all length
are wrong.

Fix length

first select everything and move all
the notes to the beginning of bar 5

the selection box

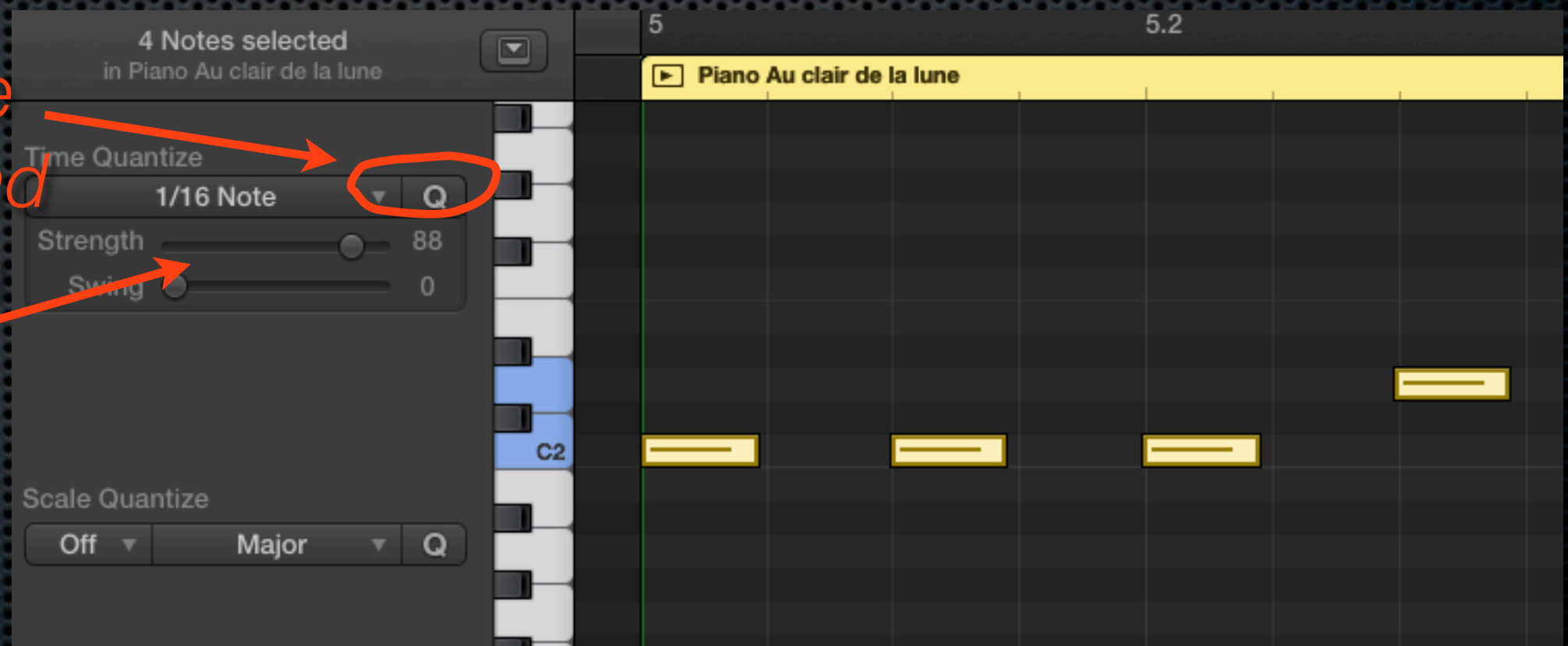*select quavers (first 4 of each bar) and set length to 1 or so*

use both zoom controls to show larger boxes

Quantize

I've selected a group of notes and ran quantize.
Logic Pro dynamically change the Strength control.
I've started with 20% and had to increase up to 88%
in order that the note are more or less on the grid.

Quantize button and strength slider

Check reloaded

After some manual moves and quantize I ended up with a track that ressembles the wikipedia score (I've noticed that the pitch is different but I don't care).
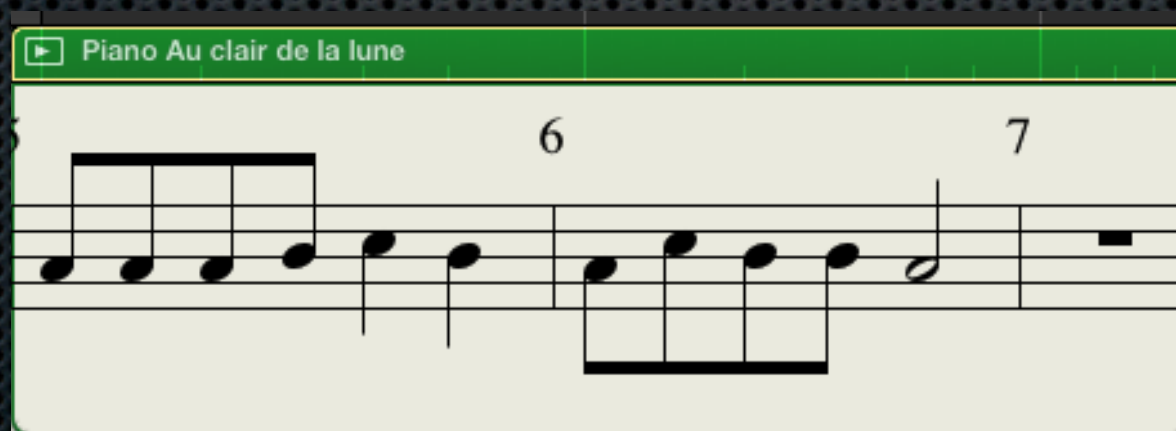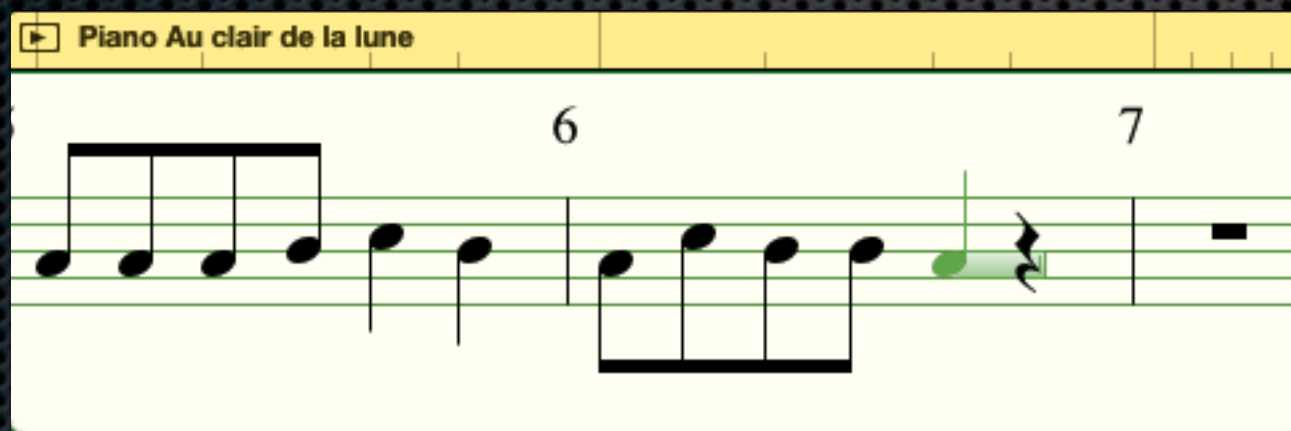
Last note is still wrong. The green handler let you change the length until is turns into a half-note.

Conclusion

Reflection

I didn't learn music nor use a DAW before, but I have some skills in drawing and photography and there are some similarities with music.

When taking the course, I featured out that digitization of analog activities has similar consequences and affect how we practice in similar ways.

Drawing

To produce an image in GIMP or Photoshop, we usually use a pen tablet to draw and paint forms. Sampling rate of the pen tablet or the software may affect the drawing and user may experience latencies.

Layers are used instead of tracks. Anyway this requires the same kind of organization and labeling to be able to retrieve parts of the drawing, embed external elements, move or resize them independently, keep track of alternate takes.

Vector images

Vector images are like MIDI to me. Instead of samping a free hand drawing, user will create a form from a few points and a set of equations that describes how to draw a form (an ellipse, a square) or go the next point (curves).

This is how the information is stored, but tools provide ways to manipulate this in a more natural way and for instance bend curves with handlers.

Photography

Most of the camera are digital.

Post-production of digital images is all about computations. There are tenths of parameters that may be altered, change saturation, exposure, light ... and cause intensive recomputations of part or all of the image.

Rendering/Monitor

For both drawing, photography and music, rendering and quick feedback on actions is important. Musicians take care of their headphones' pitch and dynamics, graphic designer and photographer take care of their screen, the accuracy color, light and geometry rendering, large size to zoom in and alter 1 pixel.

Both of them requires powerful computer and speed disks to be able to manipulate large amounts of data and give a quick feedback to user.