**Task 1**

**How is audio data different from the notated format we have seen so far in the course, and how does the audio data relate to the original notation (e.g. how is a note manifested in the audio data?).**

Audio data in Sonic Visualiser is represented in waveform by default, giving us information on the track’s changes of amplitude (volume) over time. It also gives us information on the number of channels of the track (one waveform means mono, two means stereo).

By generating different kind of visualizations we can extract more information from a track:

* A spectrogram gives us information about the changes of frequency (pitch) and volume (through the intensity of the color) over time,
* A chromagram gives us information about the specific note at a particular time.

**Task 2**

**Identify one example of a physical audio archive/collection and one example of an online/virtual audio collection. What are the characteristics of the music stored in the collection (e.g. genre, timeperiod etc.)? What’s the medium on which the audio is stored? And in which format?**

**Physical:** The ARChive of Contemporary Music

Contemporary Music – 1950 to present

CDs, LPs, VHS, Sx4, Sx6, S – only some items have formats

**Online:** Live Music - Internet Archive

Mp3, flac, afpk, ogg, wav – some of the formats

**Discuss which musical (or perhaps non-musical) aspects can be captured by an audio recording but not in standard notated format - and vice versa? Make sure to discuss the group’s findings with the tutor.**

**Audio recording:**

* Speed
* Volume
* Mistakes
* General background noise
* Improvisations

**Notated format:**

* Title
* Key signature
* Alterations
* Composer
* Copyright
* Instruments
* More metadata

**Discuss how you would extract “meaning” (e.g. descriptive metadata) from the raw audio data without listening to the recording and manually annotating it (consider e.g. tempo, pitches/notes, or other information inherent in or available for notated music)?**

Via visualisation, through a waveform one would be able to understand volume, through a spectrogram the changes in pitch and through a chromagram the changes in notes.