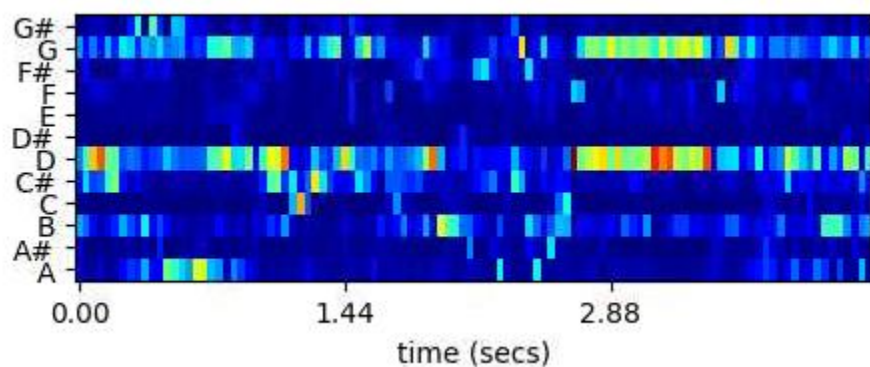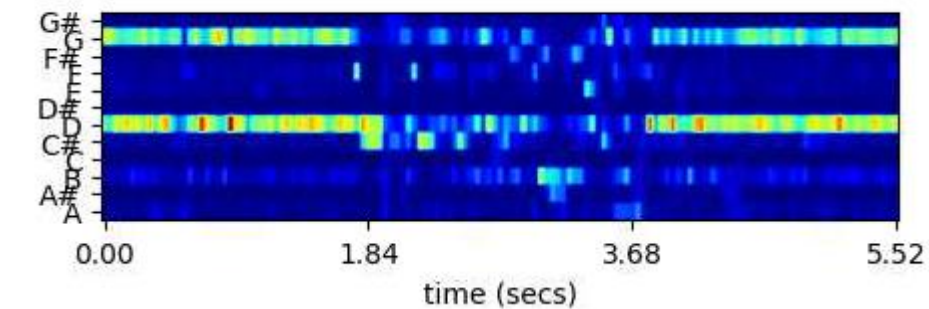# Discussion 1:

Discussion 2:

調用函式取得

```python
def mfcc(fft_magnitude, fbank, num_mfcc_feats):
    """
    Computes the MFCCs of a frame, given the fft mag

    ARGUMENTS:
        fft_magnitude:  fft magnitude abs(FFT)
        fbank:          filter bank (see mfccInitFilterBanks)
    RETURN
        ceps:           MFCCs (13 element vector)

    Note:   MFCC calculation is, in general, taken from the
            scikits.talkbox library (MIT Licence),
    #   with a small number of modifications to make it more
        compact and suitable for the pyAudioAnalysis Lib
    """

    mspec = np.log10(np.dot(fft_magnitude, fbank.T) + eps)
    ceps = dct(mspec, type=2, norm='ortho', axis=-1)[:num_mfcc_feats]
    return ceps
```

Discussion 3:

將 gTTS 裡的 lang 改成 zh(其他語言)，即可說出中文(其他語言)

```python
tts = gTTS(text='你好', lang='zh')
tts.save('hello.mp3')
```

先看有哪些語音包

```python
import pyttsx3

engine = pyttsx3.init()
voices = engine.getProperty('voices')
for voice in voices:
    print("Voice:")
    print("ID: %s" % voice.id)
    print("Name: %s" % voice.name)
    print("Languages: %s" % voice.languages)
    print("Gender: %s" % voice.gender)
    print("Age: %s\n" % voice.age)
```

並且將 setProperty 改成其他語言

```python
import pyttsx3

engine = pyttsx3.init()

engine.setProperty('voice', 'zh')
engine.say('你好')
engine.runAndWait()
```