

16) assignment(practical python):

```
import pyaudio
import wave
import numpy as np
import matplotlib.pyplot as plt

filename = 'file_example_WAV_1MG.wav';

CHUNKSIZE = 1024

portaudio = pyaudio.PyAudio ()

stream = portaudio.open(format=pyaudio.paInt16, channels=1, rate=44100,
input=True,frames_per_buffer=CHUNKSIZE)

data = stream.read(CHUNKSIZE)
numpydata = np.frombuffer(data, dtype=np.int16)

plt.plot(numpydata)
plt.show()

stream.stop_stream()
stream.close()
portaudio.terminate()
```