Practical No 1

Aim :

a. Install NLTK
b. Convert the given text to speech
c. Convert audio file Speech to Text.

Program:

>pip install gtts

>pip install nltk

>pip install SpeechRecognition pydub

b. Convert the given text to speech

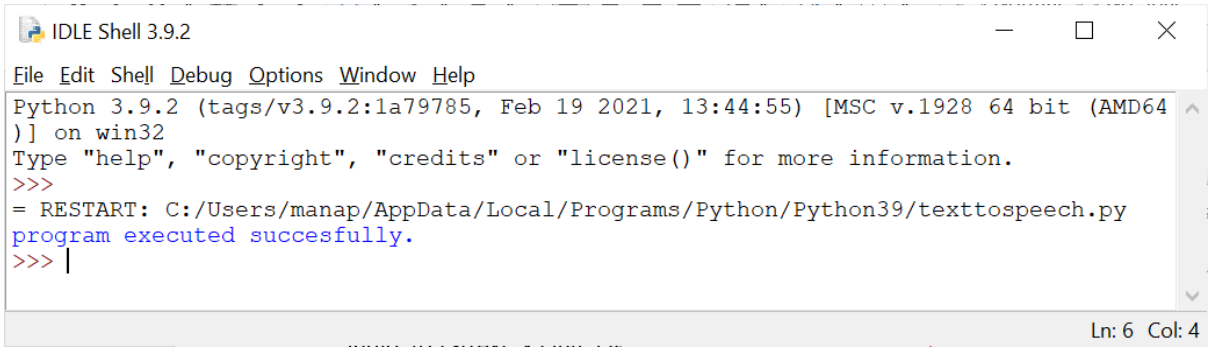
Steps:

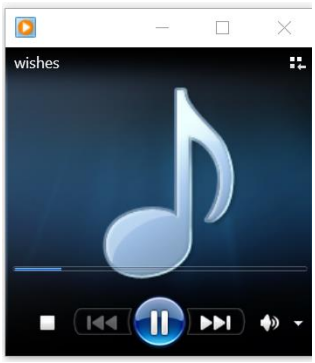
1. create file.txt in respective folder.
2. Enter some message in file.txt.
3. Save texttospeech.py file at same location.

Texttospeech.py

```
from gtts import gTTS

import os

f = open('1.txt')

x=f.read()

langauge='en'

audio=gTTS(text=x,lang=langauge)

audio.save("wishes.wav")

os.system("wishes.wav")

print("program executed succesfully.")
```

Output:

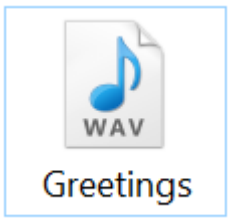


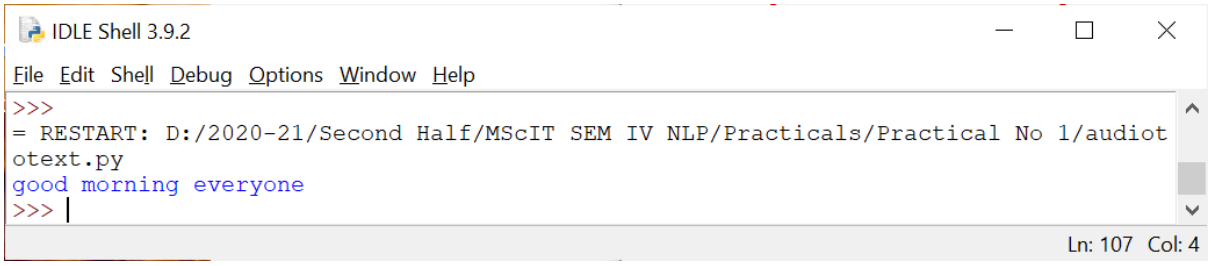


C. Convert audio file Speech to Text.

```
import speech_recognition as sr
filename = "Greetings.wav"
# initialize the recognizer
r = sr.Recognizer()
# open the file
with sr.AudioFile(filename) as source:
    # listen for the data (load audio to memory)
    audio_data = r.record(source)
    # recognize (convert from speech to text)
    text = r.recognize_google(audio_data)
    print(text)
```

Output:




IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
>>>
= RESTART: D:/2020-21/Second Half/MScIT SEM IV NLP/Practicals/Practical No 1/audiot
otext.py
good morning everyone
>>>
Ln: 107 Col: 4