

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

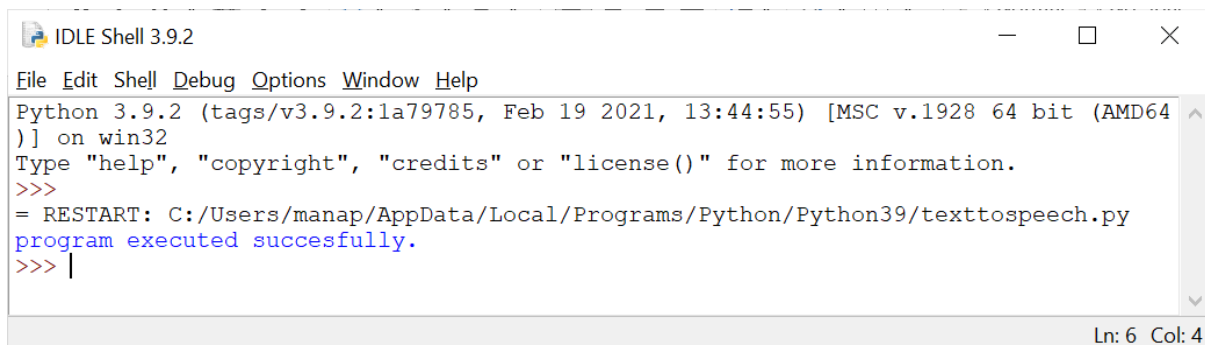
Steps:

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

Texttospeech.py

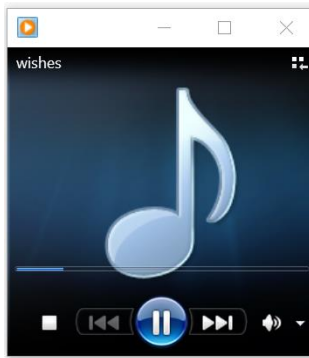
```
from gtts import gTTS
import os
f = open('1.txt')
x=f.read()
langauge='en'
audio=gTTS(text=x,lang=langauge)
audio.save("wishes.wav")
os.system("wishes.wav")
print("program executed succesfully.")
```

Output:



```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:/Users/manap/AppData/Local/Programs/Python/Python39/texttospeech.py
program executed succesfully.
>>> |
```

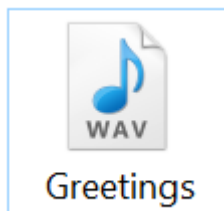
Ln: 6 Col: 4

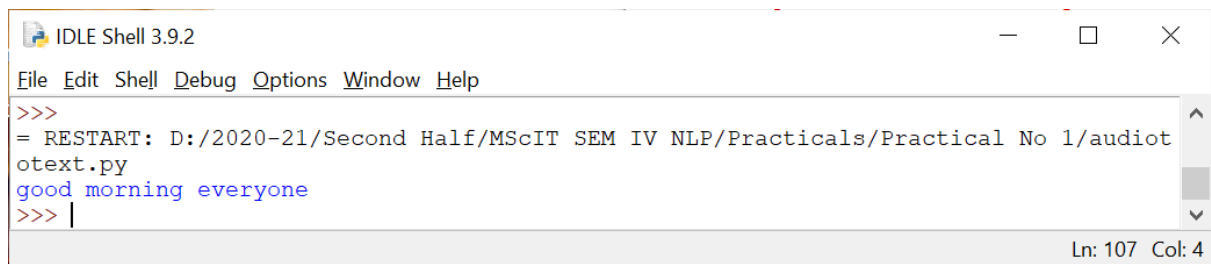


C. Convert audio file Speech to Text.

```
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:





The screenshot shows a window titled "IDLE Shell 3.9.2" with standard Windows window controls (minimize, maximize, close). The menu bar includes "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The main text area contains the following text: a prompt ">>>", a command to restart a script " = RESTART: D:/2020-21/Second Half/MScIT SEM IV NLP/Practicals/Practical No 1/audiototext.py", and the output of the script "good morning everyone" in blue text. A second prompt ">>>" is on the next line with a cursor. A vertical scrollbar is on the right. The status bar at the bottom right shows "Ln: 107 Col: 4".

```
>>>
 = RESTART: D:/2020-21/Second Half/MScIT SEM IV NLP/Practicals/Practical No 1/audiot
otext.py
good morning everyone
>>> |
```

Ln: 107 Col: 4