#Ethu only speech recognize cheythu englishill thane convert cheyum

import speech\_recognition as sr  
  
def translate():  
 r = sr.Recognizer()  
 with sr.Microphone() as source:  
  
 print('Listening')  
 r.pause\_threshold = 0.7  
 audio = r.listen(source)  
 try:  
 print("Recognizing")  
 Query = r.recognize\_google(audio, language='en-In')  
  
 # for listening the command in indian english  
 print("the query is printed='", Query, "'")  
  
  
 except Exception as e:  
 print(e)  
 print("Say that again sir")  
 return "None"  
 return Query  
  
  
# call the function  
translate()

#Ethu speech recorgnise cheythittu athu text akum allel text speech akum with GUI (tkinter)

from tkinter import \*  
from tkinter.messagebox import showinfo  
from gtts import gTTS  
import speech\_recognition as sr  
import os  
mainwindow= Tk()  
mainwindow.title('Text-To-Speech and Speech-To-Text Converter')  
mainwindow.geometry('500x500')  
mainwindow.resizable(0, 0)  
mainwindow.configure(bg='yellow')  
  
  
def say(text1):  
 language = 'en'  
 speech = gTTS(text=text1, lang=language, slow=False)  
 speech.save("text.mp3")  
 os.system("start text.mp3")  
  
  
def recordvoice():  
 while True:  
 r = sr.Recognizer()  
 with sr.Microphone() as source:  
 audio = r.listen(source)  
 try:  
 text1 = r.recognize\_google(audio, language="en-IN") #or "Ml-IN"  
 except:  
 pass  
 return text1  
  
  
def TextToSpeech():  
 texttospeechwindow = Toplevel(mainwindow)  
 texttospeechwindow.title('Text-to-Speech Converter')  
 texttospeechwindow.geometry("500x500")  
 texttospeechwindow.configure(bg='Blue')  
  
 Label(texttospeechwindow, text='Text-to-Speech Converter by DataFlair', font=("Times New Roman", 15),  
 bg='Blue').place(x=50)  
  
 text = Text(texttospeechwindow, height=5, width=30, font=12)  
 text.place(x=7, y=60)  
  
 speakbutton = Button(texttospeechwindow, text='listen', bg='coral', command=lambda: say(str(text.get(1.0, END))))  
 speakbutton.place(x=140, y=200)  
  
  
def SpeechToText():  
 speechtotextwindow = Toplevel(mainwindow)  
 speechtotextwindow.title('Speech-to-Text Converter')  
 speechtotextwindow.geometry("500x500")  
 speechtotextwindow.configure(bg='pink')  
  
 Label(speechtotextwindow, text='Speech-to-Text Converter ', font=("Comic Sans MS", 15),  
 bg='IndianRed').place(x=50)  
  
 text = Text(speechtotextwindow, font=12, height=3, width=30)  
 text.place(x=7, y=100)  
  
 recordbutton = Button(speechtotextwindow, text='Record', bg='Sienna',  
 command=lambda: text.insert(END, recordvoice()))  
 recordbutton.place(x=140, y=50)  
  
  
Label(mainwindow, text='Text-To-Speech and Speech-To-Text Converter',  
 font=('Times New Roman', 16), bg='red', wrap=True, wraplength=450).place(x=25, y=0)  
  
texttospeechbutton = Button(mainwindow, text='Text-To-Speech Conversion', font=('Times New Roman', 16), bg='Purple',  
 command=TextToSpeech)  
texttospeechbutton.place(x=100, y=150)  
  
speechtotextbutton = Button(mainwindow, text='Speech-To-Text Conversion', font=('Times New Roman', 16), bg='Purple',  
 command=SpeechToText)  
speechtotextbutton.place(x=100, y=250)  
  
mainwindow.update()  
mainwindow.mainloop()