#*pip install pyaudio*

#*pip install pipwin*

#*pip install pyttsx3*

#*pip install speechrecognition*

#*pip list*

#*Function definitions for the following two functions*

#*for the "record\_text" function we need following libraries so the python can access our microphone.*

*import* speech\_recognition *as* sr

*import* pyttsx3

*import* os

*import* openai

*from* openai *import* OpenAI

client = OpenAI( api\_key= "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")

# *Function to convert text to speech*

def *SpeakText*(command):

    #*Initialize the engine*

    engine = pyttsx3.init()

    engine.say(command)

    engine.runAndWait()

#*Initialize the recognizer (It is the Python object used to interact with microphone)*

r = sr.Recognizer()

# *Will allow the python to record audio input from PC microphone. It will convert audio input into the string.*

def *record\_text*():

    # *Loop in case of errors or it cannot convert audio to text so we need to try again*

*while*(1):

*try*:

            # *use the microphone as source for input.*

*with* sr.Microphone() *as* source2:

                # *Prepare recognizer to recieve input*

                r.adjust\_for\_ambient\_noise(source2, duration=0.9)

                #*listen for the user's input*

                audio2 = r.listen(source2)

                # *Using google to recognize audio from users input*

                MyText = r.recognize\_google(audio2)

*return* MyText

*except* sr.RequestError *as* e:

            print("Could not request results; {0}".format(e))

*except* sr.UnknownValueError:

            print  ("unknown error occured")

*return*

def *send\_to\_chatGPT*(messages, model="gpt-3.5-turbo"): #*This function sending messages to ChatGPT*

    response = client.chat.completions.create(

        model=model,

        messages=messages,

        max\_tokens=100,

        n=1,

        stop=None,

        temperature=0.5,

    )

    message = response.choices[0].message.content

    messages.append(response.choices[0].message)#*we use messages array to append (put together) the text we recieved*

*return* message

messages = [] #*Initialize messages Array where its purpose is to keep track of converstaion with ChatGPT*

*while*(1):

    text = record\_text() # *It returns our audio commands into text format*

    messages.append({"role":"user","content":text}) #*we use messages array to append (put together) the text we recieved*

    response = send\_to\_chatGPT(messages) #*Once the messages array is updated we send it to ChatGPT and we recieve back and recorded in "response"*

    SpeakText(response) # *This Audibly say the response.*

    print(response)