Notes:

What is sapi5?

Microsoft developed speech API.

#Helps in synthesis and recognition of voice.

The first and foremost thing for ssistant is that it should be able to speak To make our J.A.R.V.I.S. talk, we will make a function called speak(). This function will take audio as an argument, and then it will pronounce it

We made a function called speak() at the starting of this tutorial. Now, we will write our speak() function to convert our text to speech.

We will create a main() function, and inside this main() Function, we will call our speak function.

Whatever you will write inside this speak() function will be converted into speech. Congratulations! With this, our J.A.R.V.I.S. has its own voice, and it is ready to speak.

Code:

```
import pyttsx3
engine = pyttsx3.init('sapi5')

voices= engine.getProperty('voices') #getting details of current voice

engine.setProperty('voice', voices[0].id)


def speak(audio):
```

```
    engine.say(audio)
    engine.runAndWait()
if __name__=="__main__" :
  speak("Hi whatis your name")
```

Notes num#2:

we will make a wishme() function that will make our J.A.R.V.I.S. wish or greet the user according to the time of computer or pc. To provide current or live time to A.I., we need to import a module called datetime. Import this module to your program by

Now, let's start defining the wishme() function

#we have stored the current hour or time integer value into a variable named hour. Now, we will use this hour value inside an if-else loop

The next most important thing for our A.I. assistant is that it should take command with the help of the microphone of the user's system. So, now we will make a takeCommand() function. With the help of the takeCommand() function, our A.I. assistant will return a string output by taking microphone #input from the user

We have successfully created our takeCommand() function. Now we are going to add a try and except block to our program to handle errors effectively.

Now, we will develop logic for different commands such as Wikipedia searches

we have used an if statement to check whether Wikipedia is in the user's search query or not. If Wikipedia is found in the user's search query, then two sentences from the summary of the Wikipedia page will be converted to speech with the speak function's help.

we are using an elif loop to check whether Youtube is in the user's query. Let' suppose the user gives a command as "J.A.R.V.I.S., open youtube." So, open youtube will be in the user's query, and the elif condition will be true.

we are using the datetime() function and storing the current or live system time into a variable called strTime. After storing the time in strTime, we are passing this variable as an argument in speak function. Now, the time string will be converted into speech.

To send an email, we need to import a module called smtplib.

What is smtplib?

#Simple Mail Transfer Protocol (SMTP) is a protocol that allows us to send emails and route emails between mail servers. An instance method called sendmail is present in the SMTP module. This instance method allows us to send an email. It takes 3 parameters:

The sender: Email address of the sender.

The receiver: T Email of the receiver.

The message: A string message which needs to be sent to one or more than one recipient.

We will create a sendEmail() function, which will help us send emails to one or more than one recipient

Note: Do not forget to 'enable the less secure apps' feature in your Gmail account. Otherwise, the sendEmail function will not work properly.

We are using the try and except block to handle any possible error while sending emails.

Code num#2:

```
#pip install pipwin then pipwin install pyaudio
import pyttsx3 #pip install pyttsx3
import speech_recognition as sr #pip install speechRecognition
import datetime
import wikipedia #pip install wikipedia
import webbrowser
import os
import smtplib
import speech_recognition as sr

engine = pyttsx3.init('sapi5')
voices = engine.getProperty('voices')
# print(voices[1].id)
engine.setProperty('voice', voices[0].id) #if you need female voice so change 0 to
1


def speak(audio):
   engine.say(audio)
   engine.runAndWait()


def wishMe():
   hour = int(datetime.datetime.now().hour)
   if hour>=13 and hour<15:
      speak("Good Morning!")

   elif hour>=15 and hour<18:
      speak("Good Afternoon!")
```

```
    else:
        speak("Good Night!")

    speak("I am Jarvis Sir. Please tell me how may I help you")

def takeCommand():
    #It takes microphone input from the user and returns string output

    r = sr.Recognizer()
    with sr.Microphone() as source:
        print("Listening...")
        r.pause_threshold =1
        audio = r.listen(source)

    try:
        print("Recognizing...")
        query = r.recognize_google(audio, language='en-ud')
        print(f"User said: {query}\n")

    except Exception as e:
        # print(e)
        print("Say that again please...")
        return "None"
    return query
def sendEmail(to, content):
    server = smtplib.SMTP('smtp.gmail.com', 587)
    server.ehlo()
    server.starttls()
    server.login('kizerks977@gmail.com', 'khizerkamran') #(your email ,your
password)
    server.sendmail('kizerks977@gmail.com', to, content) #you have to change
email here
    server.close()

if __name__ == "__main__":
    wishMe()
    while True:
```

```
    # if 1:
        query = takeCommand().lower()
        if 'email' in query:
            try:
                speak("What should I say?")

                content = takeCommand()
                to = "kizerks977@gmail.com " #  change email
                sendEmail(to, content)
                speak("Email has been sent!")
            except Exception as e:
                print(e)
                speak("Sorry my friend khizer bhai. I am not able to send this email")
        elif 'wikipedia' in query:
            speak('Searching Wikipedia...')
            query = query.replace("wikipedia", "")
            results = wikipedia.summary(query, sentences=2)
            speak("Wikipedia")
            print(results)
            speak(results)



        elif 'open youtube' in query:
            webbrowser.open("https://www.youtube.com/")

        elif 'open stackoverflow' in query:
            webbrowser.open("https://stackoverflow.com/")
        elif 'open github' in query:
            webbrowser.open("https://github.com/khizerkamran")
        elif 'open good' in query:
            webbrowser.open("https://thumbs.gfycat.com/RawShoddyIsopod-
size_restricted.gif")
        elif 'open utech' in query:
            webbrowser.open("https://www.utech-edu.com/")
        elif 'time' in query:
            strTime = datetime.datetime.now().strftime("%H:%M:%S")
            speak(f"time is  {strTime}")
```