```python
import subprocess
import wolframalpha
import wikiquote
import pyttsx3
import json
import
speech_recognition as sr
import datetime
import wikipedia
import webbrowser
import
os
import winshell
import pyjokes
import feedparser
import smtplib
import ctypes
import
time
import requests
import fileinput
import getpass
import wmi
import os
from pathlib
import Path
from clint.textui import progress
from selenium import webdriver
from ecapture
import ecapture as ec
from bs4 import BeautifulSoup
import win32com.client as wincl
from
urllib.request import urlopen


engine = pyttsx3.init('sapi5')
voices =
engine.getProperty('voices')
engine.setProperty('voice', voices[1].id)

DIRECTORIES = {

"HTML": [".html5", ".html", ".htm",
".xhtml"],
    "IMAGES": [".jpeg", ".jpg",
".tiff", ".gif", ".bmp", ".png", ".bpg",
"svg",
                ".heif", ".psd"],
    "VIDEOS":
[".avi", ".flv", ".wmv", ".mov", ".mp4",
".webm", ".vob", ".mng",
                ".qt",
".mpg", ".mpeg", ".3gp", ".mkv"],

"DOCUMENTS": [".oxps", ".epub", ".pages",
".docx", ".doc", ".fdf", ".ods",

".odt", ".pwi", ".xsn", ".xps", ".dotx",
".docm", ".dox",
                ".rvg", ".rtf",
".rtfd", ".wpd", ".xls", ".xlsx", ".ppt",

                "pptx"],
    "ARCHIVES": [".a", ".ar",
".cpio", ".iso", ".tar", ".gz", ".rz",
".7z",
                ".dmg", ".rar", ".xar",
".zip"],
    "AUDIO": [".aac", ".aa",
".aac", ".dvf", ".m4a", ".m4b", ".m4p",
".mp3",
                ".msv", "ogg", "oga",
".raw", ".vox", ".wav", ".wma"],
```

```python
    "PLAINTEXT": [".txt", ".in", ".out"],

    "PDF": [".pdf"],
        "PYTHON":
[".py",".pyi"],
        "XML": [".xml"],

    "EXE": [".exe"],
        "SHELL": [".sh"]
}
FILE_FORMATS
= {file_format: directory
                    for directory, file_formats in DIRECTORIES.items()

                    for file_format in file_formats}


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

    engine.runAndWait()

def countdown(n) :
    while n > 0:
        print (n)
        n
= n - 1
    if n ==0:
        print('BLAST OFF!')

def wishMe():
    hour =
int(datetime.datetime.now().hour)
    if hour>=0 and hour<12:
        speak("Good
Morning Sir!")

    elif hour>=12 and hour<18:
        speak("Good Afternoon
Sir!")

    else:
        speak("Good Evening Sir!")


assname=("Jarvis 1 point o")
    speak("I am your Assistant")

speak(assname)

def usrname():
    speak("What should i call you sir")

uname=takeCommandname()
    speak("Welcome Mister")
    speak(uname)

print("####################")
    print("Welcome Mr.",uname)

print("####################")

def quotaton():

speak(wikiquote.quote_of_the_day())
    print(wikiquote.quote_of_the_day())

def
takeCommand():
    r = sr.Recognizer()
    with sr.Microphone() as source:

print("Listening...")
        r.pause_threshold = 1
```

```python
        audio =
r.listen(source)

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

    except Exception as e:
        print(e)

print("Unable to Recognizing your voice.")
        return "None"

return query

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

    try:
        print("Trying to Recognizing Name...")

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

    except Exception as e:
        print(e)

print("Unable to Recognizing your name.")
        takeCommandname()

return "None"
    return query

def takeCommandmessage():
    r =
sr.Recognizer()
    with sr.Microphone() as source:
        print("Enter Your
Message")
        r.pause_threshold = 1
        audio = r.listen(source)

    try:

     query = r.recognize_google(audio, language='en-in')
        print(f'Message to be sent is
: {query}\n')

    except Exception as e:
        print (e)
        print("Unable to
recognize your message")
        print("Check your Internet Connectivity")

return query

def takeCommanduser():
    r = sr.Recognizer()
    with sr.Microphone() as
source:
        print("Name of User or Group")
        r.pause_threshold = 1

  audio = r.listen(source)
```

```python
    try:
        query = r.recognize_google(audio,
language='en-in')
        print(f'Client to whome message is to be sent is : {query}\n')


 except Exception as e:
        print (e)
        print("Unable to recognize Client
name")
        speak("Unable to recognize Client Name")

print("Check your Internet Connectivity")
    return query

def
takeCommandcontent():
    r = sr.Recognizer()
    with sr.Microphone() as source:

print("What Should i say, sir")
        r.pause_threshold = 1
        audio =
r.listen(source)

    try:
        query = r.recognize_google(audio, language='en-in')

    print(f'Message to be sent is: {query}\n')

    except Exception as e:
        print
(e)
        print("Unable to recognize")
    return query

def organize():

for entry in os.scandir():
        if entry.is_dir():
            continue
        file_path
= Path(entry.name)
        file_format = file_path.suffix.lower()
        if file_format in
FILE_FORMATS:
            directory_path = Path(FILE_FORMATS[file_format])

directory_path.mkdir(exist_ok=True)

file_path.rename(directory_path.joinpath(file_path))
    try:

os.mkdir("OTHER")
    except:
        pass
    for dir in os.scandir():

try:
            if dir.is_dir():
                os.rmdir(dir)
            else:

    os.rename(os.getcwd() + '/' + str(Path(dir)), os.getcwd() + '/OTHER/' + str(Path(dir)))

     except:
            pass

def sendEmail(to, content):
    server =
smtplib.SMTP('smtp.gmail.com', 587)
    server.ehlo()
    server.starttls()

server.login('youremail@email.com', 'your-password')
```

```python
server.sendmail('youremail@email.com', to, content)
    server.close()


if __name__ ==
'__main__':
    clear = lambda: os.system('cls')
    clear()
    wishMe()
    usrname()

 speak("Can i tell you a quote of day")
    useropt=takeCommand().lower()
    if
'yes' in useropt or 'sure' in useropt:
        quotaton()
    else:

speak("Taking you to command function")

    speak("How can i Help you,
Sir")
    while True:
        query = takeCommand().lower()

assname=("Jarvis 1 point o")
        if 'wikipedia' in query:

speak('Searching Wikipedia...')
            query = query.replace("wikipedia",
"")
            results = wikipedia.summary(query, sentences=3)

speak("Answer From Wikipedia")
            print(results)

speak(results)

        elif "Good Morning" in query:
            speak("A
warm" +query)
            speak("How are you Mister")

speak(assname)

        elif "wikipedia" in query and "hindi" in query:

            speak('Searching Wikipedia...')
            query =
query.replace("wikipedia", "")
            query =
query.replace("hindi", "")
            results = wikipedia.summary(query,
sentences=3)
            speak("According to Wikipedia")
            r =
sr.Recognizer()
            results = r.recognize_google(results, language='hi')

print(results)
            speak(results)

        elif 'open youtube' in query:

 speak("Taking You To Youtube\n")

webbrowser.open("youtube.com")

        elif 'open google' in query:

speak("Taking you to Google\n")

webbrowser.open("google.com")
```

```python
        elif "change brightness to " in
query:
            query=query.replace("change brightness to","")

    brightness = query
            c = wmi.WMI(namespace='wmi')
            methods =
c.WmiMonitorBrightnessMethods()[0]
            methods.WmiSetBrightness(brightness, 0)


    elif "Organize Files" in query:
            organize()

        elif 'open
stackoverflow' in query:
            speak("Here you go to Stack Over flow.Happy
coding")
            webbrowser.open("stackoverflow.com")

        elif
"stackoverflow " in query:
            speak("Stackoverflow khola ja rha
h")
            webbrowser.open("stackoverflow.com")

        elif
"send a whatsaap message" in query or "send a WhatsApp message" in query:

            driver = webdriver.Chrome('Web Driver Location')

driver.get('https://web.whatsapp.com/')
            speak("Scan QR code before
proceding")
            tim=10
            time.sleep(tim)

speak("Enter Name of Group or User")
            name = takeCommanduser()

    speak("Enter Your Message")
            msg = takeCommandmessage()

count = 1
            user = driver.find_element_by_xpath('//span[@title =
"{}"]'.format(name))
            user.click()
            msg_box =
driver.find_element_by_class_name('_3u328')
            for i in range(count):

 msg_box.send_keys(msg)
                button = driver.find_element_by_class_name('_3M-N-')

                button.click()

        elif "stackoverflow " in
query:
            speak("Stackoverflow khola ja rha h")

webbrowser.open("stackoverflow.com")

        elif 'play music' in query or
"play song" in query or "gaana"in query or "song" in query:

        #music_dir = "G:\\Song"
            username = getpass.getuser()

music_dir = "C:\\Users\\"+username+"\\Music"
            songs =
os.listdir(music_dir)
            print(songs)

random=os.startfile(os.path.join(music_dir, songs[1]))
```

```python
        elif 'the time' in query:

            strTime = datetime.datetime.now().strftime("%H:%M:%S")

speak(f"Sir, the time is {strTime}")

        elif "samay" in query:

        strTime = datetime.datetime.now().strftime("%H:%M:%S")

speak(f"samaye hai {strTime}")

        elif 'open opera' in query:

codePath = r"C:\\Users\\GAURAV\\AppData\\Local\\Programs\\Opera\\launcher.exe"

       os.startfile(codePath)

        elif 'email to gaurav' in query:
            try:

            content = takeCommandcontent()
                to =
"gauravkumarjha27@gmail.com"
                sendEmail(to, content)

    speak("Email has been sent!")
            except Exception as e:

 print(e)
                speak("I am not able to send this email")

        elif
'how are you' in query:
                speak("I am fine , Thank you")

        speak("How are you, Sir")

        elif "change my name to" in query:

           query=query.replace("change my name to","")

assname=query

        elif "change name" in query:
            speak("What
would you like to call me ,Sir ")
            assname = takeCommand()

speak("Thanks for naming me")

        elif "what's your name" in query
or "What is your name" in query:
            speak("My friends call me")

           speak(assname)
            print("My friends call me",assname)


elif 'exit' in query:
            speak("Thanks for giving me your time")

   exit()

        elif "who made you" in query or "who created you" in
query:
            speak("I have been created by Gaurav.")

        elif 'joke'
in query:
            speak(pyjokes.get_joke())

        elif "calculate" in
query:
```

```python
            app_id = "Wolframe Alpha API"
            client =
wolframalpha.Client(app_id)
            indx = query.lower().split().index('calculate')

        query = query.split()[indx + 1:]
            res = client.query(' '.join(query))

        answer = next(res.results).text
            print("The answer is " + answer)

            speak("The answer is " + answer)

        elif 'search' in query or
'play' in query:
            query = query.replace("search", "")

        query = query.replace("play", "")
            webbrowser.open(query)


        elif "who i am" in query:
            speak("If you talk then
definately your human.")

        elif "why you came to world" in query:

        speak("Thanks to Gaurav. further It's a secret")

        elif 'is love' in
query:
            speak("It is 7th sense that destroy all other senses")


elif "who are you" in query:
            speak("I am your virtual assistant
created by Gaurav")

        elif 'reason for you' in query:
            speak("I
was created as a Minor project by Mister Gaurav ")

        elif 'change background' in
query:
            ctypes.windll.user32.SystemParametersInfoW(20, 0,
"C:\\Users\\GAURAV\\OneDrive\\Minor Project\\Voice\\back.jpg" , 0)

speak("Background changed succesfully")

        elif 'open bluestack' in query:

            appli= r"C:\\ProgramData\\BlueStacks\\Client\\Bluestacks.exe"

os.startfile(appli)

        elif 'google news' in query:
            try:

jsonObj =
urlopen('''https://newsapi.org/v2/top-headlines?sources=google-news-in&apiKey=Google news
API key''')
                data = json.load(jsonObj)
                i = 1

speak('')
                print('''===============Google News============'''+ '\n')

      for item in data['articles']:
                    print(str(i) + '. ' + item['title'] +
'\n')
                    print(item['description'] + '\n')
                    speak(str(i)
+ '. ' + item['title'] + '\n')
                    i += 1
            except Exception as
```

```
e:
                print(str(e))

        elif "bbc news" in query:

  try:
                main_url = "
https://newsapi.org/v1/articles?source=bbc-news&sortBy=top&apiKey=BBC News API
key"
                open_bbc_page = requests.get(main_url).json()

article = open_bbc_page["articles"]
                results = []

for ar in article:
                    results.append(ar["title"])

 for i in range(len(results)):
                    print(i + 1, results[i])

except Exception as e:
                print(str(e))

        elif 'news' in query:
#samachar
            try:
                jsonObj =
urlopen('''https://newsapi.org/v1/articles?source=the-times-of-india&sortBy=top&apiKey=
Time of INDIA API key''')
                data = json.load(jsonObj)
                i = 1

            speak('here are some top news from the times of india')

print('''===============TIMES OF INDIA============'''+ '\n')
                for item in
data['articles']:
                    print(str(i) + '. ' + item['title'] + '\n')

        print(item['description'] + '\n')
                    speak(str(i) + '. ' +
item['title'] + '\n')
                    i += 1
            except Exception as e:

        print(str(e))

        elif 'lock window' in query or "system ko lock Karen"
in query:
            speak("locking the device")

ctypes.windll.user32.LockWorkStation()

        elif 'shutdown system' in query:

speak("Hold On a Sec! Your system is on its way to shut down")

subprocess.call('shutdown /p /f')

        elif 'empty recycle bin' in query:

         winshell.recycle_bin().empty(confirm=False, show_progress=False, sound=True)

   speak("Recycle Bin Recycled")

        elif "don't listen" in query or
"stop listening" in query:
            speak("for how much time you want to
stop jarvis from listening commands")
            a=int(takeCommand())

time.sleep(a)
            print(a)

        elif "where is" in query:
```

```python
query=query.replace("where is","")
            location = query

   speak("Locating ")
            speak(location)

webbrowser.open("https://www.google.nl/maps/place/" + location + "")


     elif "camera" in query or "take a photo" in query:

ec.capture(0,"Jarvis Camera ","img.jpg")

         elif
"restart" in query:
            subprocess.call(["shutdown",
"/r"])

        elif "hibernate" in query or "sleep" in
query:
            speak("Hibernating")
            subprocess.call("shutdown
/i /h")

        elif "log off" in query or "sign out" in query:

         speak("Make sure all the application are closed before sign-out")

   time.sleep(5)
            subprocess.call(["shutdown", "/l"])


elif "countdown of" in query:
            query = int(query.replace("countdown
of ",""))
            countdown(query)

        elif "write a note"
in query:
            speak("What should i write , sir")
            note=
takeCommand()
            file = open('jarvis.txt','w')
            speak("Sir, Should i
include date and time")
            snfm = takeCommand()
            if 'yes' in snfm or
'sure' in snfm:
                strTime =
datetime.datetime.now().strftime("%H:%M:%S")
                file.write(strTime)

             file.write(" :- ")
                file.write(note)

else:
                file.write(note)

        elif "show note" in
query:
            speak("Showing Notes")
            file =
open("jarvis.txt", "r")
            print(file.read())

speak(file.read(6))

        elif "update assistant" in query:

speak("After downloading file please replace this file with the downloaded one")

        url = '#url after uploading file'
            r = requests.get(url, stream=True)
```

```python
        with open("Voice.py", "wb") as Pypdf:
                total_length
= int(r.headers.get('content-length'))
                for ch in
progress.bar(r.iter_content(chunk_size = 2391975), expected_size=(total_length/1024) + 1):

                if ch:
                        Pypdf.write(ch)

        elif
"jarvis" in query:
            wishMe()
            speak("Jarvis 1 point o in
your service Mister")
            speak(assname)

        elif "weather" in
query:
            api_key = "Open weather map API key"

            from
urllib.parse import quote

            search_terms = "your search terms"

    encoded_terms = quote(search_terms)
            base_url =
f"https://www.google.com/search?q={encoded_terms}"


speak(" City name ")
            print("City name : ")

city_name=takeCommand()
            complete_url = base_url + "appid=" + api_key +
"&q=" + city_name
            response = requests.get(complete_url)

 x = response.json()
            if x["cod"] != "404":

y = x["main"]
                current_temperature = y["temp"]

      current_pressure = y["pressure"]
                current_humidiy =
y["humidity"]
                z = x["weather"]

weather_description = z[0]["description"]
                print(" Temperature
(in kelvin unit) = " +str(current_temperature)+"\n atmospheric pressure (in hPa unit)
="+str(current_pressure) +"\n humidity (in percentage) = " +str(current_humidiy)
+"\n description = " +str(weather_description))
            else:

speak(" City Not Found ")

                elif "wikipedia" in query:

          webbrowser.open("wikipedia.com")

        elif "will you be my
gf" in query or "will you be my bf" in query:    #most asked question from google
Assistant
            speak("I'm not sure about , may be you should give me some
time")

        elif "how are you" in query:
            speak("I'm
fine, glad you asked me that")

        elif "i love you" in query:

  speak("It's hard to understand")
```

```python
        elif "what is" in query or
"who is" in query:
            client= wolframalpha.Client("WOlframe Alpha API
key")
            res = client.query(query)
            try:

print(next(res.results).text)
                speak(next(res.results).text)

except StopIteration:
                print ("No results")

        elif
"open Gmail" in query:

webbrowser.open("https://mail.google.com/mail/u/0/#inbox")

        elif "open
yahoo mail" in query:

webbrowser.open("https://in.mail.yahoo.com")

        elif "Show project
Report" in query:
            speak("Opening Minor Project Report")

 projectre= r"C:\\Users\\GAURAV\\Desktop\\Minor Project\\Presentation\\Project
Report.docx"
            os.startfile(projectre)
```