import pyttsx3  
import speech\_recognition as sr  
import datetime  
import os  
import cv2  
import random  
from requests import get  
  
  
  
engine = pyttsx3.init('sapi5')  
voices = engine.getProperty('voices')  
# print(voices[0].id)  
engine.setProperty('voices', voices[0].id)  
  
#text to speech  
def speak(audio):  
 engine.say(audio)  
 print(audio)  
 engine.runAndWait()  
  
#to convert voice into text  
def takecommand():  
 r = sr.Recognizer()  
 with sr.Microphone() as source:  
 print("listening...")  
 r.pause\_threshold = 1  
 audio = r.listen(source,timeout=1,phrase\_time\_limit=5)  
  
 try:  
 print("recognizing...")  
 query = r.recognize\_google(audio, language='en-in')  
 print(f"user said: {query}")  
  
 except Exception as e:  
 speak("say that again please...")  
 return "none"  
 return query  
  
#to wish  
def wish():  
 hour = int(datetime.datetime.now().hour)  
  
 if hour>=5 and hour<12:  
 speak("good morning sir")  
 elif hour==12:  
 speak("good noon sir")  
 elif hour>12 and hour<18:  
 speak("good afternoon sir")  
 elif hour>=18 and hour<21:  
 speak("good evening sir")  
 else:  
 speak("good night sir")  
 speak("i am jarvis. please tell me how can i help you")  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 wish()  
 #while True:  
 if 1:  
  
 query = takecommand().lower()  
  
 #logic building for task  
  
 if "open notepad" in query:  
 apath = "C:\\Windows\\notepad.exe"  
 os.startfile(apath)  
  
 elif "open c program" in query:  
 bpath = "C:\\Program Files (x86)\\Dev-Cpp\\devcpp.exe"  
 os.startfile(bpath)  
  
 elif "open command prompt" in query:  
 os.system("start cmd")  
  
 elif "open camera" in query:  
 cap = cv2.VideoCapture(0)  
 while True:  
 ret, img = cap.read()  
 cv2.imshow('webcam', img)  
 k = cv2.waitKey(50)  
 if k==27:  
 break;  
 cap.release()  
 cv2.destroyAllWindows()  
  
 elif "play music" in query:  
 music\_dir = "D:\\Music"  
 songs = os.listdir(music\_dir)  
 rd = random.choice(songs)  
 os.startfile(os.path.join(music\_dir, rd))  
  
  
 elif "ip address" in query:  
 ip = get('https://api.ipify.org').text  
 speak(f"your ip address is {ip}")