### Experiment – No-11

### *Problem Statement :* Write a program to Implement pattern recognition problems of speech recognition.

### PREREQUISITES:

### Step 1: pip install pyttsx3

### Step 2: pip install Speech Recognition

### Step 3: pip install pyaudio

### IDE Environment: VsCode, Jupyter e.t.c

### Must Have: Microphone in your System

### Required: Good Internet Connection for Voice recognition through Google Voice API.

***Program:***

import pyttsx3

import speech\_recognition as sr

engine = pyttsx3.init('sapi5')

voices = engine.getProperty('voices')

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

def speak(audio):

    engine.say(audio)

    engine.runAndWait()

def takeCommand():

    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-in')

        print(f"User said: {query}\n")

    except Exception as e:

        print(e)

        print("Say that again please...")

        return "None"

    return query

if \_\_name\_\_ == "\_\_main\_\_":

    if 1:

    #while True:

        query = takeCommand().lower()

        speak(query)

### *Output :*

