.

Program coding:

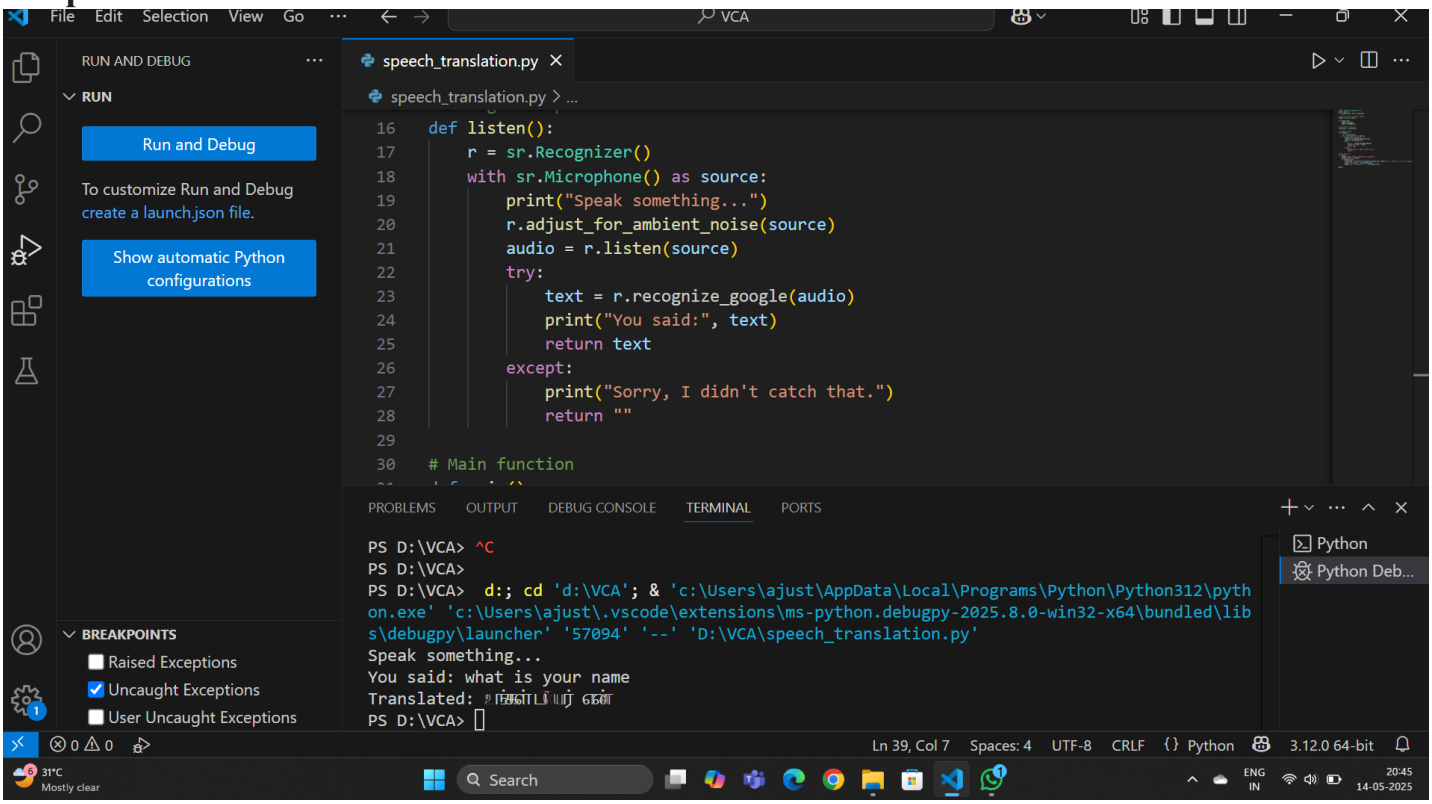
1. Input Data

```
 import speech_recognition as sr
import pyttsx3
from googletrans import Translator

# Initialize text-to-speech engine
engine = pyttsx3.init()

def speak(text):
    engine.say(text)
    engine.runAndWait()
# Initialize translator
translator = Translator()
# Recognize speech
def listen():
    r = sr.Recognizer()
    with sr.Microphone() as source:
        print("Speak something...")
        r.adjust_for_ambient_noise(source)
        audio = r.listen(source)
        try:
            text = r.recognize_google(audio)
            print("You said:", text)
            return textexcept:
            print("Sorry, I didn't catch that.")
            return ""# Main functiondef main():
    speak("Please speak something to translate")
    original_text = listen()
    if original_text:
        translated = translator.translate(original_text, dest='ta')  # Change 'ta' to any
language code
        print("Translated:", translated.text)
        speak("The translation is: " + translated.texmain()
```

Output:


File Edit Selection View Go
VCA
RUN AND DEBUG
RUN
Run and Debug
To customize Run and Debug create a launch.json file.
Show automatic Python configurations
BREAKPOINTS
Raised Exceptions
Uncaught Exceptions
User Uncaught Exceptions
speech_translation.py
speech_translation.py > ...
16 def listen():
17 r = sr.Recognizer()
18 with sr.Microphone() as source:
19 print("Speak something...")
20 r.adjust_for_ambient_noise(source)
21 audio = r.listen(source)
22 try:
23 text = r.recognize_google(audio)
24 print("You said:", text)
25 return text
26 except:
27 print("Sorry, I didn't catch that.")
28 return ""
29
30 # Main function
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS D:\VCA> ^C
PS D:\VCA>
PS D:\VCA> d:; cd 'd:\VCA'; & 'c:\Users\ajust\AppData\Local\Programs\Python\Python312\python.exe' 'c:\Users\ajust\.vscode\extensions\ms-python.debugpy-2025.8.0-win32-x64\bundled\libs\debugpy\launcher' '57094' '--' 'D:\VCA\speech_translation.py'
Speak something...
You said: what is your name
Translated: உங்கள் பெயர் என்ன
PS D:\VCA>
Python
Python Deb...
Ln 39, Col 7 Spaces: 4 UTF-8 CRLF Python 3.12.0 64-bit
31°C Mostly clear
Search
ENG IN
20:45 14-05-2025