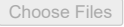


```
!pip install SpeechRecognition
```

Requirement already satisfied: SpeechRecognition in /usr/local/lib/python3.11/dist-packages (3.14.3)
Requirement already satisfied: typing-extensions in /usr/local/lib/python3.11/dist-packages (from SpeechRecognition) (4.13.2)

```
import speech_recognition as sr
import re
```


```
from google.colab import files
uploaded = files.upload()
```

 No file chosen Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.
Saving speech.mp3 to speech.mp3


```
!pip install speechrecognition pydub
```

Requirement already satisfied: speechrecognition in /usr/local/lib/python3.11/dist-packages (3.14.3)
Collecting pydub
 Downloading pydub-0.25.1-py2.py3-none-any.whl.metadata (1.4 kB)
Requirement already satisfied: typing-extensions in /usr/local/lib/python3.11/dist-packages (from speechrecognition) (4.13.2)
 Downloading pydub-0.25.1-py2.py3-none-any.whl (32 kB)
Installing collected packages: pydub
Successfully installed pydub-0.25.1

```
from pydub import AudioSegment
mp3_file="/content/speech.mp3"
wav_file="/content/speech.wav"
audio=AudioSegment.from_mp3(mp3_file)
audio.export(wav_file,format="wav")
```

 <_io.BufferedRandom name='/content/speech.wav'>

```
r = sr.Recognizer()
with sr.AudioFile('/content/speech.wav') as source:
    audio = r.record(source)
    try:
        text = r.recognize_google(audio)
        print("You said:", text)
    except sr.UnknownValueError:
        print("Could not understand audio.")
```

 You said: what is 5 + 3

```
import re
```

```
def solve_math_expression(text):
    text = text.lower()

    text = text.replace("plus", "+").replace("minus", "-")
    text = text.replace("times", "*").replace("multiplied by", "*")
    text = text.replace("divided by", "/").replace("over", "/")

    text = re.sub(r'what is|calculate|please|equals|=, ', '', text).strip()

    print("Expression to calculate:", text)

    try:
        result = eval(text)
        return result
    except Exception as e:
        return f"Could not evaluate expression: {e}"
```

```
recognized_text = "what is 5 plus 3"
```

```
result = solve_math_expression(recognized_text)
print("Result:", result)
```

↔ Expression to calculate: $5 + 3$
Result: 8

Start coding or [generate](#) with AI.