```
!pip install SpeechRecognition pydub
```

```
Collecting SpeechRecognition
  Downloading speechrecognition-3.14.3-py3-none-any.whl.metadata (30 kB)
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 SpeechRecognitio
Downloading speechrecognition-3.14.3-py3-none-any.whl (32.9 MB)
  ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 32.9/32.9 MB 34.0 MB/s eta 0:00:00
Downloading pydub-0.25.1-py2.py3-none-any.whl (32 kB)
Installing collected packages: pydub, SpeechRecognition
Successfully installed SpeechRecognition-3.14.3 pydub-0.25.1
```

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

```
<_io.BufferedRandom name='/content/tellu wav.wav'>
```

```python
import speech_recognition as sr

# Initialize recognizer
recognizer = sr.Recognizer()

# Load the WAV audio file
with sr.AudioFile("/content/tellu wav.wav") as source:
    audio_data = recognizer.record(source)

# Recognize speech using Google Speech Recognition with Telugu language code
try:
    text = recognizer.recognize_google(audio_data, language="te-IN")
    print(" Translation:")
    print(text)
except sr.UnknownValueError:
    print("Google Speech Recognition could not understand audio")
except sr.RequestError as e:
    print(f"Could not request results from Google Speech Recognition service; {e}")
```

```
 Translation:
నమస్తే మీరు ఎలా ఉన్నారు
```

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

```
<_io.BufferedRandom name='/content/engu wav.wav'>
```

```python
import speech_recognition as sr
reco = sr.Recognizer()
with sr.AudioFile("/content/engu wav.wav") as source:
  audio_data = reco.record(source)
  print("Translation: ",reco.recognize_google(audio_data))
```

```
Translation:  I'm doing well thank you how about you
```

```
!pip install googletrans==4.0.0-rc1
```

```
Requirement already satisfied: googletrans==4.0.0-rc1 in /usr/local/lib/python3.11/dist-packages (4.0.0rc1)
Requirement already satisfied: httpx==0.13.3 in /usr/local/lib/python3.11/dist-packages (from googletrans==4.0.0-r
Requirement already satisfied: certifi in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->googletrans
Requirement already satisfied: hstspreload in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->googlet
Requirement already satisfied: sniffio in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->googletrans
Requirement already satisfied: chardet==3.* in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->google
```

```
Requirement already satisfied: idna==2.* in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->googletra
Requirement already satisfied: rfc3986<2,>=1.3 in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->goo
Requirement already satisfied: httpcore==0.9.* in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->goo
Requirement already satisfied: h11<0.10,>=0.8 in /usr/local/lib/python3.11/dist-packages (from httpcore==0.9.*->ht
Requirement already satisfied: h2==3.* in /usr/local/lib/python3.11/dist-packages (from httpcore==0.9.*->httpx==0.
Requirement already satisfied: hyperframe<6,>=5.2.0 in /usr/local/lib/python3.11/dist-packages (from h2==3.*->http
Requirement already satisfied: hpack<4,>=3.0 in /usr/local/lib/python3.11/dist-packages (from h2==3.*->httpcore==0
```

```python
from googletrans import Translator

translator = Translator()
translated = translator.translate(" నమస్తే మీరు ఎలా ఉన్నారు", src='te', dest='en')
print("English Translation:", translated.text)
```

English Translation: Namaste how are you

```python
from googletrans import Translator

translator = Translator()
translated = translator.translate(" I'm doing well thank you how about you", src='en', dest='te')
print("Telugu Translation:", translated.text)
```

Telugu Translation: నేను బాగా చేస్తున్నాను మీ గురించి ఎలా ధన్యవాదాలు

```python
!pip install gTTS
```

```
Collecting gTTS
  Downloading gTTS-2.5.4-py3-none-any.whl.metadata (4.1 kB)
Requirement already satisfied: requests<3,>=2.27 in /usr/local/lib/python3.11/dist-packages (from gTTS) (2.32.3)
Collecting click<8.2,>=7.1 (from gTTS)
  Downloading click-8.1.8-py3-none-any.whl.metadata (2.3 kB)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (from requests<
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.27->gT
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.
Downloading gTTS-2.5.4-py3-none-any.whl (29 kB)
Downloading click-8.1.8-py3-none-any.whl (98 kB)
━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 98.2/98.2 kB 7.2 MB/s eta 0:00:00
Installing collected packages: click, gTTS
  Attempting uninstall: click
    Found existing installation: click 8.2.0
    Uninstalling click-8.2.0:
      Successfully uninstalled click-8.2.0
Successfully installed click-8.1.8 gTTS-2.5.4
```

```python
from gtts import gTTS
from IPython.display import Audio

a = gTTS(input("Enter any text:"))
```

Enter any text:Namaste how are you

```python
a.save("English.mp3")
```

```python
Audio("English.mp3")
```

        0:00 / 0:01

```python
a = gTTS(input("Enter any text:"))
```

Enter any text:నేను బాగా చేస్తున్నాను మీ గురించి ఎలా ధన్యవాదాలు

```python
a.save("Telugu.mp3")
```

```python
Audio("Telugu.mp3")
```

> ⇥
>
>   0:00 / 0:04

◄ ━━━ ►

```python
!pip install sounddevice scipy SpeechRecognition
```

> ⇥ Collecting sounddevice
>   Downloading sounddevice-0.5.2-py3-none-any.whl.metadata (1.6 kB)
>   Requirement already satisfied: scipy in /usr/local/lib/python3.11/dist-packages (1.15.3)
>   Requirement already satisfied: SpeechRecognition in /usr/local/lib/python3.11/dist-packages (3.14.3)
>   Requirement already satisfied: CFFI>=1.0 in /usr/local/lib/python3.11/dist-packages (from sounddevice) (1.17.1)
>   Requirement already satisfied: numpy<2.5,>=1.23.5 in /usr/local/lib/python3.11/dist-packages (from scipy) (2.0.2)
>   Requirement already satisfied: typing-extensions in /usr/local/lib/python3.11/dist-packages (from SpeechRecognitio
>   Requirement already satisfied: pycparser in /usr/local/lib/python3.11/dist-packages (from CFFI>=1.0->sounddevice)
>   Downloading sounddevice-0.5.2-py3-none-any.whl (32 kB)
>   Installing collected packages: sounddevice
>   Successfully installed sounddevice-0.5.2

◄ ━━━ ►

```python
audio_file_path = "/content/tellu wav.wav"


try:
    with sr.AudioFile(audio_file_path) as source:
        print("/content/tellu wav.wav")
        audio_data = recognizer.record(source)

    # Recognize speech
    try:
        original_text = recognizer.recognize_google(audio_data, language='te-IN')
        print("🎙 Detected (Telugu):", original_text)
        src_lang = 'te'
        dest_lang = 'en'
    except sr.UnknownValueError:
        try:
            original_text = recognizer.recognize_google(audio_data, language='en-IN')
            print("🎙 Detected (English):", original_text)
            src_lang = 'en'
            dest_lang = 'te'
        except:
            print(" ❗ Could not recognize speech.")
            exit()

    # Translate
    translated = translator.translate(original_text, src=src_lang, dest=dest_lang)
    translated_text = translated.text
    print(f"🌐 Translated ({dest_lang}):", translated_text)

    # Text-to-Speech
    tts = gTTS(translated_text, lang=dest_lang)
    temp_path = os.path.join(tempfile.gettempdir(), f"{uuid.uuid4().hex}.mp3")
    tts.save(temp_path)
    print(f"🔊 TTS audio saved to: {temp_path}")

except Exception as e:
    print("⚠️ Error:", e)
```

> ⇥ /content/tellu wav.wav
>   🎙 Detected (Telugu): నమస్తే మీరు ఎలా ఉన్నారు
>   🌐 Translated (en): Namaste how are you
>   ⚠️ Error: name 'os' is not defined

```python
audio_file_path = "/content/engu wav.wav"  # change this to your file


try:
    with sr.AudioFile(audio_file_path) as source:
        print("/content/engu wav.wav")
        audio_data = recognizer.record(source)
```

```python
    # Recognize speech
    try:
        original_text = recognizer.recognize_google(audio_data, language='en-IN')
        print("🎙 Detected (English):", original_text)
        src_lang = 'en'
        dest_lang = 'te'
    except sr.UnknownValueError:
        try:
            original_text = recognizer.recognize_google(audio_data, language='te-IN')
            print("🎙 Detected (Telugu):", original_text)
            src_lang = 'te'
            dest_lang = 'en'
        except:
            print(" ❗ Could not recognize speech.")
            exit()

    # Translate
    translated = translator.translate(original_text, src=src_lang, dest=dest_lang)
    translated_text = translated.text
    print(f"🌍 Translated ({dest_lang}):", translated_text)

    # Text-to-Speech
    tts = gTTS(translated_text, lang=dest_lang)
    temp_path = os.path.join(tempfile.gettempdir(), f"{uuid.uuid4().hex}.mp3")
    tts.save(temp_path)
    print(f"🔊 TTS audio saved to: {temp_path}")

except Exception as e:
    print("⚠ Error:", e)
```

```
⇄  /content/engu wav.wav
    🎙 Detected (English): I'm doing well thank you how about you
    🌍 Translated (te): నేను బాగా చేస్తున్నాను మీ గురించి ఎలా ధన్యవాదాలు
    ⚠ Error: name 'os' is not defined
```

Start coding or generate with AI.