```
!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-pa
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/
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-package
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-p
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-p
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 7.4 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
```

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


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

```
Enter any text:hello ,how are you
```

```
a.save("speech.mp3")


Audio("speech.mp3")
```

0:01 / 0:01

```
!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-pa
Downloading speechrecognition-3.14.3-py3-none-any.whl (32.9 MB)
   ━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 32.9/32.9 MB 37.2 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
```

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

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

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

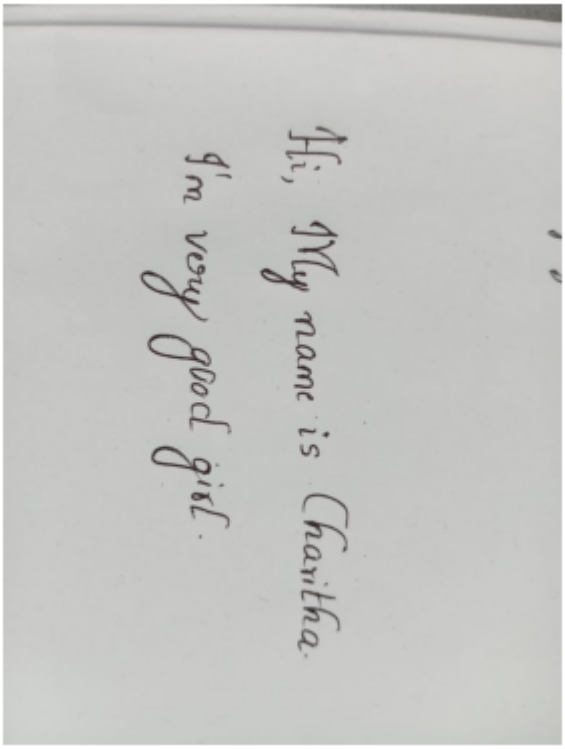
```
Transcript:  ham charita I love chicken biryani prepared by my mom
```

```
!pip install pytesseract pillow
```

```
Collecting pytesseract
  Downloading pytesseract-0.3.13-py3-none-any.whl.metadata (11 kB)
Requirement already satisfied: pillow in /usr/local/lib/python3.11/dist-packages (11.
Requirement already satisfied: packaging>=21.3 in /usr/local/lib/python3.11/dist-pack
Downloading pytesseract-0.3.13-py3-none-any.whl (14 kB)
Installing collected packages: pytesseract
Successfully installed pytesseract-0.3.13
```

```
from PIL import Image
import pytesseract
import matplotlib.pyplot as plt
ip = "/content/handwriting.jpeg"
plt.imshow(Image.open(ip))
plt.axis('off')
```

```
(np.float64(-0.5), np.float64(962.5), np.float64(1279.5), np.float64(-0.5))
```

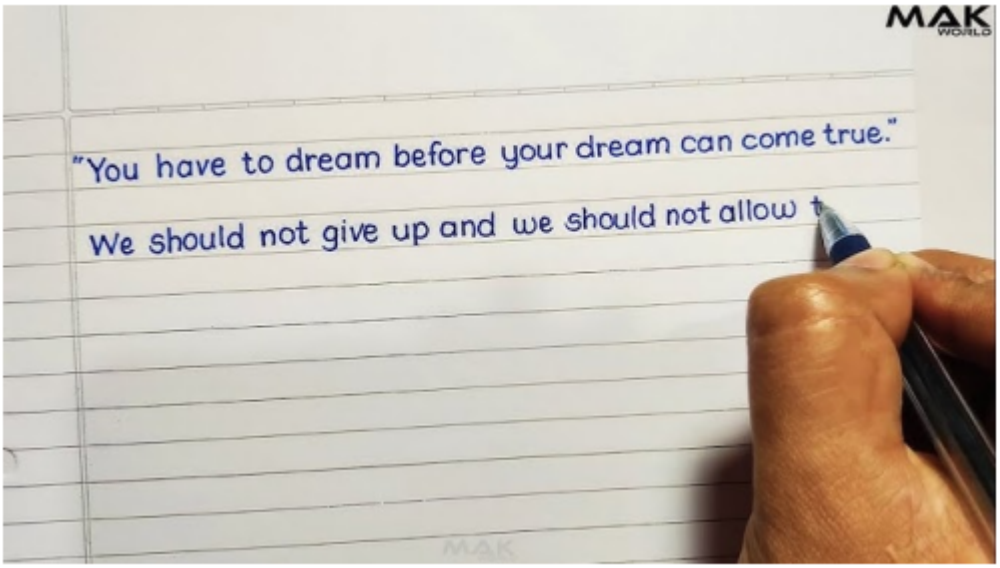



```
img = Image.open(ip)
text = pytesseract.image_to_string(img)
print("Extracted text:",text)
```

```
Extracted text: Wi, My nome is Chantha
ti ey je git
```

```
from PIL import Image
import pytesseract
import matplotlib.pyplot as plt
ip = "/content/hand.jpg"
plt.imshow(Image.open(ip))
plt.axis('off')
```

```
(np.float64(-0.5), np.float64(685.5), np.float64(385.5), np.float64(-0.5))
```




```
img = Image.open(ip)
text = pytesseract.image_to_string(img)
print("Extracted text:",text)
```

```
Extracted text:

     "You have to dream before your dream can come true.”

     jp and we should not allow


     “We should not give ul
```

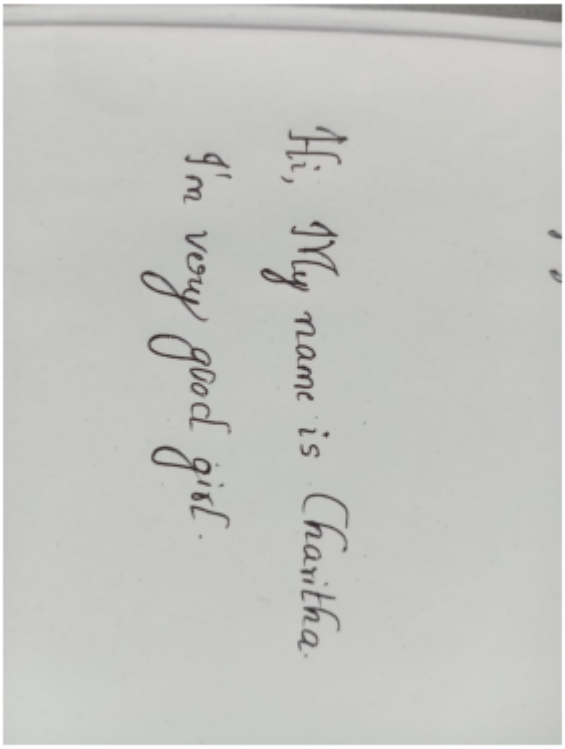
```
a.save("hand.jpg")
```

```
Audio("/content/hand.mp3")
```

0:00 / 0:07

```
from PIL import Image
import pytesseract
import matplotlib.pyplot as plt
ip = "/content/handwriting.jpeg"
plt.imshow(Image.open(ip))
plt.axis('off')
```

```
(np.float64(-0.5), np.float64(962.5), np.float64(1279.5), np.float64(-0.5))
```




```
img = Image.open(ip)
text = pytesseract.image_to_string(img)
print("Extracted text:",text)
```

```
Extracted text: Wi, My nome is Chantha
ti ey je git
```

```
from gtts import gTTS
from IPython.display import Audio
tts = gTTS(text)
tts.save("handwriting.mp3")
```

```
display(Audio("handwriting.mp3", autoplay=True))
```

0:03 / 0:03

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

```
irement already satisfied: googletrans==4.0.0-rc1 in /usr/local/lib/python3.11/dist-pa
irement already satisfied: httpx==0.13.3 in /usr/local/lib/python3.11/dist-packages (
irement already satisfied: certifi in /usr/local/lib/python3.11/dist-packages (from ht
irement already satisfied: hstspreload in /usr/local/lib/python3.11/dist-packages (fro
irement already satisfied: sniffio in /usr/local/lib/python3.11/dist-packages (from ht
irement already satisfied: chardet==3.* in /usr/local/lib/python3.11/dist-packages (fr
irement already satisfied: idna==2.* in /usr/local/lib/python3.11/dist-packages (from
irement already satisfied: rfc3986<2,>=1.3 in /usr/local/lib/python3.11/dist-packages
```

```
irement already satisfied: httpcore==0.9.* in /usr/local/lib/python3.11/dist-packages
irement already satisfied: h11<0.10,>=0.8 in /usr/local/lib/python3.11/dist-packages
irement already satisfied: h2==3.* in /usr/local/lib/python3.11/dist-packages (from ht
irement already satisfied: hyperframe<6,>=5.2.0 in /usr/local/lib/python3.11/dist-pack
irement already satisfied: hpack<4,>=3.0 in /usr/local/lib/python3.11/dist-packages (f
```

```
from googletrans import Translator
t = Translator()
text = input("Enter any text: ")
translated = t.translate(text,dest='ko')
print("Translated text:",translated.text)
```

```
Enter any text: hello
Translated text: 안녕하세요
```

```
from pydub import AudioSegment
mp3_file="/content/charithamp3.mp3"
wav_file="/content/charithawav.wav"
audio=AudioSegment.from_mp3(mp3_file)
audio.export(wav_file,format="wav")
```

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

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

```
Transcript:  Napier City
```

```
telugu_text = reco.recognize_google(audio_data, language='te-IN')
print("Telugu Transcript:", telugu_text)
```

```
Telugu Transcript: నా పేరు చరిత
```

```
from googletrans import Translator

translator = Translator()
translated = translator.translate("నా పేరు చరిత", src='te', dest='en')
print("English Translation:", translated.text)
```

```
English Translation: My name is Charita
```

```
from gtts import gTTS
from IPython.display import Audio
english_text = "My name is Charita"
```

```
speech = gTTS(text=english_text, lang='en')
speech.save("cherry.mp3")

Audio("cherry.mp3")
```

0:01 / 0:01

```
import speech_recognition as sr
recognizer = sr.Recognizer()
with sr.AudioFile("/content/voicewav.wav") as source:
    audio = recognizer.record(source)


voice_text = recognizer.recognize_google(audio)
print("You said:", voice_text)
```

```
You said: 2 + 3
```

```
expression = voice_text.lower()
expression = expression.replace("plus", "+")
expression = expression.replace("minus", "-")
expression = expression.replace("times", "*").replace("x", "*")
expression = expression.replace("into", "*")
expression = expression.replace("divided by", "/").replace("by", "/")
print("Evaluating:", expression)
try:
    result = eval(expression)
    print("Result:", result)
except:
    print("Could not evaluate the expression.")
```

```
Evaluating: 2 + 3
Result: 5
```

Start coding or generate with AI.

Start coding or generate with AI.

Start coding or generate with AI.

Start coding or generate with AI.

Start coding or generate with AI.

Start coding or generate with AI.