PYTHON DAY - 12

Pantech e Learning
DIGITAL LEARNING SIMPLIFIED

SPEECH RECOGNITION & TRANSLATION

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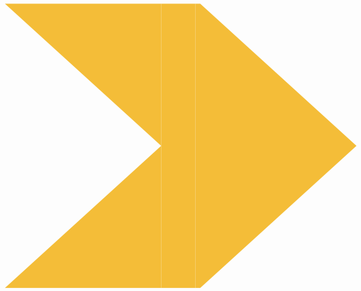
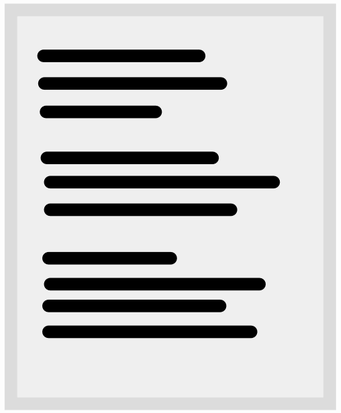
SPEECH RECOGNITION

Speech



Text



SPEECH RECOGNITION

```
pip install SpeechRecognition

pip install PyAudio
```

SPEECH RECOGNITION

```
import speech_recognition as sr

with sr.Microphone() as source:

    print("wait for calibrations")

    recogonizer.adjust_for_ambient_noise(source,duration=3)

    print("start speaking")

    audio=recogonizer.listen(source)


    print("recorded successfully")

    speech=recogonizer.recognize_google(audio)

    speech=speech.lower()

    print(speech)
```

TEXT TO SPEECH

Text

Speech

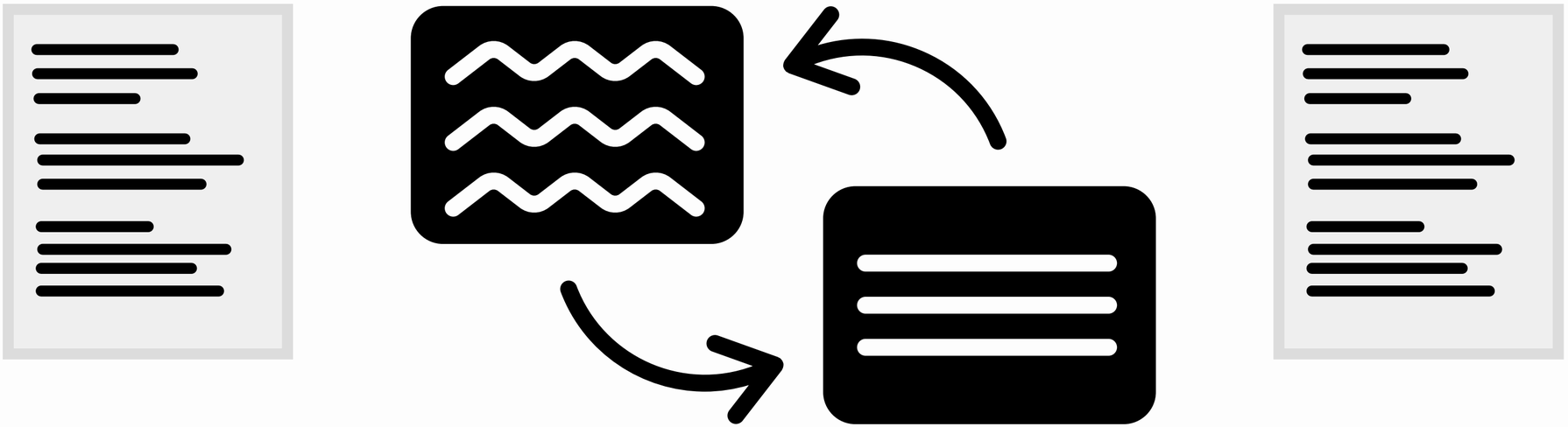
TEXT TO SPEECH

```
pip install pyttsx3
```

TEXT TO SPEECH

```python
import pyttsx3

engine=pyttsx3.init()

sentence="Hello world"

engine.setProperty("rate",100)

engine.say(sentence)

engine.runAndWait()
```

TRANSLATION



TRANSLATION

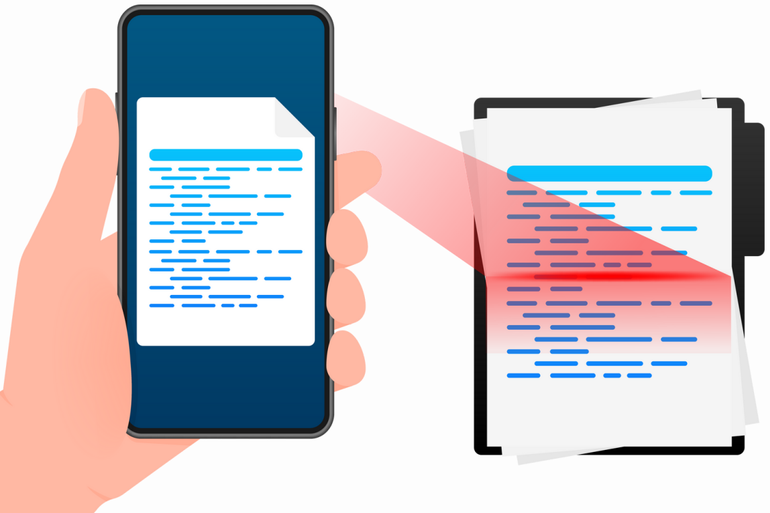
```
pip install googletrans==3.1.0a0
```

TRANSLATION

```
import googletrans

translator = googletrans.Translator()



text="hello all"

print(googletrans.LANGCODES)

language = input("Type the translation language code:").lower()

translation = translator.translate(text=text,dest=language)

print(translation)
```

IMAGE TO TEXT

Optical character recognition



Tesseract OCR

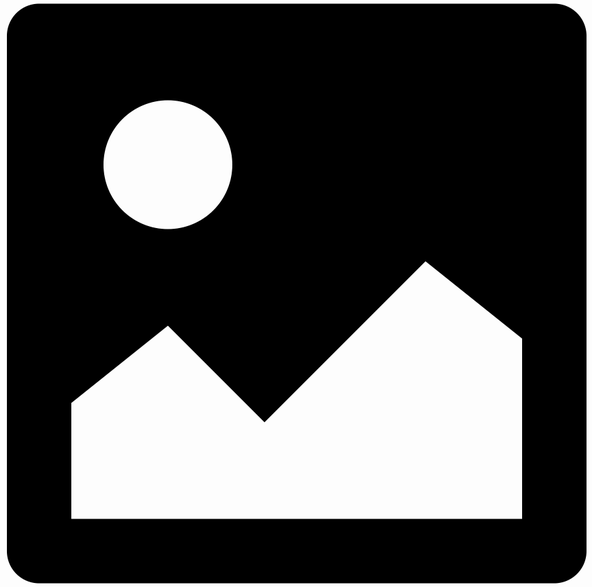
IMAGE TO TEXT

```
pip install pytesseract
```

IMAGE TO TEXT

```
pytesseract.pytesseract.tesseract_cmd = ""


print(pytesseract.image_to_string(image))
```

INTEGRATING ALL



ASSIGNMENT

2

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ATM SIMULATOR

Rules:

- Create ATM simulator using class and object in python
- It should check username and password and allow the user to use ATM
- It should have balance, withdrawl, and deposit options
- Everytime the user tries to use the options, send 6 digit OTP using random module and ask the user to enter that OTP and verify

THANKS FOR WATCHING

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