```
!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 SpeechRecognition) (4.13.2)
     Downloading speechrecognition-3.14.3-py3-none-any.whl (32.9 MB)
                                                - 32.9/32.9 MB 10.9 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
import speech_recognition as sr
from pydub import AudioSegment
!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<3,>=2.27->gtts) (3.4.2
     Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.27->gtts) (3.10)
     Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.27->gtts) (2.4.0)
     Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.27->gtts) (2025.4.26)
     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 4.0 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
from pydub import AudioSegment
mp3_file = "/content/Meeting Audio.mp3"
wav file ="/content/speech.wav"
audio = AudioSegment.from_mp3(mp3_file)
audio.export(wav_file, format="wav")
→▼ <_io.BufferedRandom name='/content/speech.wav'>
import speech_recognition as sr
reco = sr.Recognizer()
with sr.AudioFile("/content/speech.wav") as source:
 audio_data = reco.record(source)
 print("Transcipt: ",reco.recognize_google(audio_data))
🚁 Transcipt: the first one to the CEO or CFO under Section 33304 subsection 1 no later than May 15th of each year this is the municipal a
from transformers import pipeline
s = pipeline("summarization")
```

```
To model was supplied, defaulted to sshleifer/distilbart-cnn-12-6 and revision a4f8f3e (https://huggingface.co/sshleifer/distilbart-cnn-
     Using a pipeline without specifying a model name and revision in production is not recommended.
     /usr/local/lib/python3.11/dist-packages/huggingface_hub/utils/_auth.py:94: UserWarning:
     The secret `HF_TOKEN` does not exist in your Colab secrets.
     To authenticate with the Hugging Face Hub, create a token in your settings tab (https://huggingface.co/settings/tokens), set it as secre
     You will be able to reuse this secret in all of your notebooks.
     Please note that authentication is recommended but still optional to access public models or datasets.
       warnings.warn(
                                                              1.80k/1.80k [00:00<00:00, 66.8kB/s]
     config.json: 100%
     pytorch model.bin: 100%
                                                                    1.22G/1.22G [00:07<00:00, 152MB/s]
     model.safetensors: 100%
                                                                    1.22G/1.22G [00:16<00:00, 126MB/s]
     tokenizer_config.json: 100%
                                                                      26.0/26.0 [00:00<00:00, 678B/s]
     vocab.json: 100%
                                                              899k/899k [00:00<00:00, 9.96MB/s]
     merges.txt: 100%
                                                              456k/456k [00:00<00:00, 9.63MB/s]
     Device set to use cou
audio = '/content/Meeting Audio.mp3'
result = s(audio)
result[0].get('summary_audio')
🏵 Your max_length is set to 142, but your input_length is only 11. Since this is a summarization task, where outputs shorter than the inpu
import smtplib
from email.mime.text import MIMEText
from email.mime.multipart import MIMEMultipart
# === CONFIGURATION ===
sender_email = "231fa04942@gmail.com"
receiver_email = "231fa04956@gmail.com"
password = "bgum hgml jjxj sqmk" # Use your Gmail App Password here
smtp_server = "smtp.gmail.com"
smtp_port = 587
# The 's' variable was previously assigned a summarization pipeline.
# You have redefined 's' as a function here.
# Depending on your intent, you might want to rename this function
# if you still plan to use the summarization pipeline later.
def s(audio):
    return [{'summary_text': "1. Project X completed.\n2. Next meeting on Friday.\nKey Decision: Approve budget."}]
# Assuming you want to use the function 's' defined above for now
audio = None
summary_result = s(audio)
summary_text = summary_result[0].get('summary_text', 'No summary available')
subject = "Meeting summary"
body = (
    "Dear Team, \n\n"
    "This is an autogenerated email for the meeting summary:\n\n"
    f"{summary_text}\n\n"
    "Best Regards,\nAkhila"
)
message = MIMEMultipart()
message["From"] = sender email
message["To"] = receiver_email
message["Subject"] = subject
message.attach(MIMEText(body, "plain"))
try:
    server = smtplib.SMTP(smtp_server, smtp_port)
    server.starttls()
    server.login(sender_email, password)
    server.sendmail(sender_email, receiver_email, message.as_string())
    print("Email sent successfully!")
except Exception as e:
    print(f"Error: {e}")
```

```
finally:
    try:
        server.quit()
    except:
        # Added 'pass' statement to provide an indented block for the inner except

→ Email sent successfully!

qa = pipeline("question-answering")
Ty No model was supplied, defaulted to distilbert/distilbert-base-cased-distilled-squad and revision 564e9b5 (https://huggingface.co/distil
     Using a pipeline without specifying a model name and revision in production is not recommended.
     config.json: 100%
                                                             473/473 [00:00<00:00, 29.9kB/s]
     Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back to regular HTTP download. For better perfc
     WARNING:huggingface_hub.file_download:Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back to r
                                                                   261M/261M [00:01<00:00, 198MB/s]
     tokenizer_config.json: 100%
                                                                     49.0/49.0 [00:00<00:00, 2.71kB/s]
     vocab.txt: 100%
                                                            213k/213k [00:00<00:00, 17.0MB/s]
     tokenizer.json: 100%
                                                                436k/436k [00:00<00:00, 12.2MB/s]
     Device set to use cpu
t = '''just a couple of comments and questions first one to the CEO or CFO'''
q = "How can the council address residents' frustration about limited public engagement?"
from gtts import gTTS
from IPython.display import Audio
!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-rc1) (0.13.3)
     Requirement already satisfied: certifi in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->googletrans==4.0.0-rc1) (2025.4.2
     Requirement already satisfied: hstspreload in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3-googletrans==4.0.0-rc1) (2025
     Requirement already satisfied: sniffio in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->googletrans==4.0.0-rc1) (1.3.1)
     Requirement already satisfied: chardet==3.* in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->googletrans==4.0.0-rc1) (3.0
     Requirement already satisfied: idna==2.* in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->googletrans==4.0.0-rc1) (2.10)
     Requirement already satisfied: rfc3986<2,>=1.3 in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->googletrans==4.0.0-rc1) (
     Requirement already satisfied: httpcore==0.9.* in /usr/local/lib/python3.11/dist-packages (from httpx==0.13.3->googletrans==4.0.0-rc1) (
     Requirement already satisfied: h11<0.10,>=0.8 in /usr/local/lib/python3.11/dist-packages (from httpcore==0.9.*->httpx==0.13.3->googletra
     Requirement already satisfied: h2=3.* in /usr/local/lib/python3.11/dist-packages (from httpcore==0.9.*->httpx==0.13.3->googletrans==4.0
     Requirement already satisfied: hyperframe<6,>=5.2.0 in /usr/local/lib/python3.11/dist-packages (from h2==3.*->httpcore==0.9.*->httpx==0.
     Requirement already satisfied: hpack<4,>=3.0 in /usr/local/lib/python3.11/dist-packages (from h2==3.*->httpcore==0.9.*->httpx==0.13.3->g
from transformers import pipeline
from googletrans import Translator
sentiment_analyzer = pipeline("sentiment-analysis")
     No model was supplied, defaulted to distilbert/distilbert-base-uncased-finetuned-sst-2-english and revision 714eb0f (https://huggingface
     Using a pipeline without specifying a model name and revision in production is not recommended.
     config.ison: 100%
                                                             629/629 [00:00<00:00, 11.9kB/s]
     Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back to regular HTTP download. For better perfc
     WARNING:huggingface_hub.file_download:Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back to r
     model.safetensors: 100%
                                                                   268M/268M [00:02<00:00, 98.3MB/s]
     tokenizer_config.json: 100%
                                                                     48.0/48.0 [00:00<00:00, 2.24kB/s]
     vocab.txt: 100%
                                                            232k/232k [00:00<00:00, 3.38MB/s]
     Device set to use cpu
a = pipeline("sentiment-analysis")
     No model was supplied, defaulted to distilbert/distilbert-base-uncased-finetuned-sst-2-english and revision 714eb0f (https://huggingface
     Using a pipeline without specifying a model name and revision in production is not recommended.
```

https://colab.research.google.com/drive/18gClg66tpqKG8Vbu\_gHN\_WQaBPc7umWq#printMode=true

Device set to use cpu

```
text = input("Enter text: ")
print(a(text))
Enter text: just a couple of comments and questions first one to the CEO
    [{'label': 'NEGATIVE', 'score': 0.9728459119796753}]
from googletrans import Translator
t = Translator()
text = input("Enter text: ")
translated = t.translate(text,src='en', dest='ta')
print("Translated text:", translated.text)
Enter text: just a couple of comments and questions first one to the CEO
    Translated text: தலைமை நிர்வாக அதிகாரிக்கு முதலில் இரண்டு கருத்துகள் மற்றும் கேள்விகள்
from sklearn.feature extraction.text import TfidfVectorizer
from sklearn.cluster import KMeans
import matplotlib.pyplot as plt
documents = [
   "Discuss project timeline and deliverables",
    "Review budget allocation for Q3",
    "Assign tasks to team members",
   "Finalize design specifications",
   "Discuss marketing strategy",
   "Review project risks and mitigation plans",
    "Plan next sprint and assign user stories"
vectorizer = TfidfVectorizer(stop_words='english')
X = vectorizer.fit_transform(documents)
num clusters = 3
kmeans = KMeans(n_clusters=num_clusters, random_state=42)
labels = kmeans.fit_predict(X)
for idx, doc in enumerate(documents):
   print(f"Cluster {labels[idx]}: {doc}")
Triangle Cluster 2: Discuss project timeline and deliverables
    Cluster 1: Review budget allocation for Q3
    Cluster 0: Assign tasks to team members
    Cluster 0: Finalize design specifications
    Cluster 2: Discuss marketing strategy
    Cluster 1: Review project risks and mitigation plans
    Cluster 0: Plan next sprint and assign user stories
!pip install spacy
Frequirement already satisfied: spacy in /usr/local/lib/python3.11/dist-packages (3.8.5)
    Requirement already satisfied: spacy-legacy<3.1.0,>=3.0.11 in /usr/local/lib/python3.11/dist-packages (from spacy) (3.0.12)
    Requirement already satisfied: spacy-loggers<2.0.0,>=1.0.0 in /usr/local/lib/python3.11/dist-packages (from spacy) (1.0.5)
    Requirement already satisfied: murmurhash<1.1.0,>=0.28.0 in /usr/local/lib/python3.11/dist-packages (from spacy) (1.0.12)
    Requirement already satisfied: cymem<2.1.0,>=2.0.2 in /usr/local/lib/python3.11/dist-packages (from spacy) (2.0.11)
    Requirement already satisfied: preshed<3.1.0,>=3.0.2 in /usr/local/lib/python3.11/dist-packages (from spacy) (3.0.9)
    Requirement already satisfied: thinc<8.4.0,>=8.3.4 in /usr/local/lib/python3.11/dist-packages (from spacy) (8.3.6)
    Requirement already satisfied: wasabi<1.2.0,>=0.9.1 in /usr/local/lib/python3.11/dist-packages (from spacy) (1.1.3)
    Requirement already satisfied: srsly<3.0.0,>=2.4.3 in /usr/local/lib/python3.11/dist-packages (from spacy) (2.5.1)
    Requirement already satisfied: catalogue<2.1.0,>=2.0.6 in /usr/local/lib/python3.11/dist-packages (from spacy) (2.0.10)
    Requirement already satisfied: weasel@0.5.0,>=0.1.0 in /usr/local/lib/python3.11/dist-packages (from spacy) (0.4.1)
    Requirement already satisfied: typer<1.0.0,>=0.3.0 in /usr/local/lib/python3.11/dist-packages (from spacy) (0.15.3)
    Requirement already satisfied: tqdm<5.0.0,>=4.38.0 in /usr/local/lib/python3.11/dist-packages (from spacy) (4.67.1)
     Requirement already satisfied: numpy>=1.19.0 in /usr/local/lib/python3.11/dist-packages (from spacy) (2.0.2)
    Requirement already satisfied: requests<3.0.0,>=2.13.0 in /usr/local/lib/python3.11/dist-packages (from spacy) (2.32.3)
    Requirement already satisfied: pydantic!=1.8,!=1.8.1,<3.0.0,>=1.7.4 in /usr/local/lib/python3.11/dist-packages (from spacy) (2.11.4)
    Requirement already satisfied: jinja2 in /usr/local/lib/python3.11/dist-packages (from spacy) (3.1.6)
    Requirement already satisfied: setuptools in /usr/local/lib/python3.11/dist-packages (from spacy) (75.2.0)
    Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.11/dist-packages (from spacy) (24.2)
    Requirement already satisfied: langcodes<4.0.0,>=3.2.0 in /usr/local/lib/python3.11/dist-packages (from spacy) (3.5.0)
    Requirement already satisfied: language-data>=1.2 in /usr/local/lib/python3.11/dist-packages (from langcodes<4.0.0,>=3.2.0->spacy) (1.3.
    Requirement already satisfied: annotated-types>=0.6.0 in /usr/local/lib/python3.11/dist-packages (from pydantic!=1.8,!=1.8.1,<3.0.0,>=1.
    Requirement already satisfied: pydantic-core==2.33.2 in /usr/local/lib/python3.11/dist-packages (from pydantic!=1.8,!=1.8.1,<3.0.0,>=1.7
    Requirement already satisfied: typing-extensions>=4.12.2 in /usr/local/lib/python3.11/dist-packages (from pydantic!=1.8,!=1.8.1,<3.0.0,>
    Requirement already satisfied: typing-inspection>=0.4.0 in /usr/local/lib/python3.11/dist-packages (from pydantic!=1.8,!=1.8.1,<3.0.0,>=
    Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (from requests<3.0.0,>=2.13.0->spacy)
    Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from requests<3.0.0,>=2.13.0->spacy) (2.10)
```

```
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests<3.0.0,>=2.13.0->spacy) (2.4.
     Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests<3.0.0,>=2.13.0->spacy) (2025)
     Requirement already satisfied: blis<1.4.0,>=1.3.0 in /usr/local/lib/python3.11/dist-packages (from thinc<8.4.0,>=8.3.4->spacy) (1.3.0)
     Requirement already satisfied: confection<1.0.0,>=0.0.1 in /usr/local/lib/python3.11/dist-packages (from thinc<8.4.0,>=8.3.4->spacy) (0.
     Requirement already satisfied: click>=8.0.0 in /usr/local/lib/python3.11/dist-packages (from typer<1.0.0,>=0.3.0->spacy) (8.1.8)
     Requirement already satisfied: shellingham>=1.3.0 in /usr/local/lib/python3.11/dist-packages (from typer<1.0.0,>=0.3.0->spacy) (1.5.4)
     Requirement already satisfied: rich>=10.11.0 in /usr/local/lib/python3.11/dist-packages (from typer<1.0.0,>=0.3.0->spacy) (13.9.4)
     Requirement already satisfied: cloudpathlib<1.0.0,>=0.7.0 in /usr/local/lib/python3.11/dist-packages (from weasel<0.5.0,>=0.1.0->spacy)
     Requirement already satisfied: smart-open<8.0.0,>=5.2.1 in /usr/local/lib/python3.11/dist-packages (from weasel<0.5.0,>=0.1.0->spacy) (7
     Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.11/dist-packages (from jinja2->spacy) (3.0.2)
     Requirement already satisfied: marisa-trie>=1.1.0 in /usr/local/lib/python3.11/dist-packages (from language-data>=1.2->langcodes<4.0.0,>
     Requirement already satisfied: markdown-it-py>=2.2.0 in /usr/local/lib/python3.11/dist-packages (from rich>=10.11.0->typer<1.0.0,>=0.3.0
     Requirement already satisfied: pygments<3.0.0,>=2.13.0 in /usr/local/lib/python3.11/dist-packages (from rich>=10.11.0->typer<1.0.0,>=0.3
     Requirement already satisfied: wrapt in /usr/local/lib/python3.11/dist-packages (from smart-open<8.0.0,>=5.2.1->weasel<0.5.0,>=0.1.0->sr
     Requirement already satisfied: mdurl~=0.1 in /usr/local/lib/python3.11/dist-packages (from markdown-it-py>=2.2.0->rich>=10.11.0->typer<1
import spacy
import re
# Load spaCy English model
nlp = spacy.load("en_core_web_sm")
def extract action items(sentences):
    action_items = []
    for sent in sentences:
       doc = nlp(sent)
        # Extract possible assignee (PERSON entity or proper noun at start)
       persons = [ent.text for ent in doc.ents if ent.label_ == "PERSON"]
        if not persons:
           for token in doc:
                if token.pos_ == "PROPN" and token.dep_ in ("nsubj", "nsubjpass", "compound"):
                    persons.append(token.text)
                    hreak
        # Extract deadline (first DATE or TIME entity)
        deadlines = [ent.text for ent in doc.ents if ent.label_ in ("DATE", "TIME")]
        deadline = deadlines[0] if deadlines else None
        # Extract main verbs indicating actions
        verbs = [token.lemma_ for token in doc if token.pos_ == "VERB" and token.dep_ in ("ROOT", "aux", "xcomp")]
        action_verb = " ".join(verbs) if verbs else None
        # If there's a person and a verb, assume it's an action item
        if persons and verbs:
           action_item = {
                "assignee": persons[0],
                "action": sent,
                "deadline": deadline
           action_items.append(action_item)
    return action_items
# Example meeting sentences
sentences = [
    "Ravi will finalize the report by Monday.",
    "Priya to schedule the next meeting.",
    "Send the revised budget to the team.",
    "Anil will update the project plan by tomorrow.",
    "Discuss the new marketing strategy.",
    "Karan to follow up with the client by Friday.",
    "Email the presentation to John."
]
# Extract and print action items
items = extract action items(sentences)
print("Extracted Action Items:")
for item in items:
   print(f"- Action: {item['action']}")
    print(f" Assigned to: {item['assignee']}")
    if item['deadline']:
       print(f" Deadline: {item['deadline']}")
    print()
```

→ Extracted Action Items:

```
- Action: Priya to schedule the next meeting.
      Assigned to: Priya
    - Action: Anil will update the project plan by tomorrow.
      Assigned to: Anil
      Deadline: tomorrow
     - Action: Karan to follow up with the client by Friday.
      Assigned to: Karan
      Deadline: Friday
     - Action: Email the presentation to John.
      Assigned to: John
!sudo apt-get install portaudio19-dev python3-pyaudio
→ Reading package lists... Done
    Building dependency tree... Done
    Reading state information... Done
    The following additional packages will be installed:
      libportaudio2 libportaudiocpp0
    Suggested packages:
      portaudio19-doc python-pyaudio-doc
    The following NEW packages will be installed:
      libportaudio2 libportaudiocpp0 portaudio19-dev python3-pyaudio
    0 upgraded, 4 newly installed, 0 to remove and 34 not upgraded.
    Need to get 213 kB of archives.
    After this operation, 1,043 kB of additional disk space will be used.
    Get:1 http://archive.ubuntu.com/ubuntu jammy/universe amd64 libportaudio2 amd64 19.6.0-1.1 [65.3 kB]
    Get:2 http://archive.ubuntu.com/ubuntu jammy/universe amd64 libportaudiocpp0 amd64 19.6.0-1.1 [16.1 kB]
    Get:3 http://archive.ubuntu.com/ubuntu jammy/universe amd64 portaudio19-dev amd64 19.6.0-1.1 [106 kB]
    Get:4 http://archive.ubuntu.com/ubuntu jammy/universe amd64 python3-pyaudio amd64 0.2.11-1.3ubuntu1 [25.9 kB]
    Fetched 213 kB in 1s (234 kB/s)
    debconf: unable to initialize frontend: Dialog
    debconf: (No usable dialog-like program is installed, so the dialog based frontend cannot be used. at /usr/share/perl5/Debconf/FrontEn
    debconf: falling back to frontend: Readline
    debconf: unable to initialize frontend: Readline
    debconf: (This frontend requires a controlling tty.)
    debconf: falling back to frontend: Teletype
    dpkg-preconfigure: unable to re-open stdin:
    Selecting previously unselected package libportaudio2:amd64.
    (Reading database \dots 126102 files and directories currently installed.)
    Preparing to unpack .../libportaudio2_19.6.0-1.1_amd64.deb ...
    Unpacking libportaudio2:amd64 (19.6.0-1.1) ...
    Selecting previously unselected package libportaudiocpp0:amd64.
    Preparing to unpack .../libportaudiocpp0_19.6.0-1.1_amd64.deb ...
    Unpacking libportaudiocpp0:amd64 (19.6.0-1.1) ...
    Selecting previously unselected package portaudio19-dev:amd64.
    Preparing to unpack .../portaudio19-dev_19.6.0-1.1_amd64.deb ...
    Unpacking portaudio19-dev:amd64 (19.6.0-1.1) ...
    Selecting previously unselected package python3-pyaudio.
    Preparing to unpack .../python3-pyaudio_0.2.11-1.3ubuntu1_amd64.deb ...
    Unpacking python3-pyaudio (0.2.11-1.3ubuntu1) ...
    Setting up libportaudio2:amd64 (19.6.0-1.1) ...
    Setting up libportaudiocpp0:amd64 (19.6.0-1.1) ...
    Setting up portaudio19-dev:amd64 (19.6.0-1.1) ...
    Setting up python3-pyaudio (0.2.11-1.3ubuntu1) ...
    Processing triggers for libc-bin (2.35-0ubuntu3.8) ...
    /sbin/ldconfig.real: /usr/local/lib/libumf.so.0 is not a symbolic link
    /sbin/ldconfig.real: /usr/local/lib/libtcm_debug.so.1 is not a symbolic link
    /sbin/ldconfig.real: /usr/local/lib/libtbbbind.so.3 is not a symbolic link
    /sbin/ldconfig.real: /usr/local/lib/libhwloc.so.15 is not a symbolic link
    /sbin/ldconfig.real: /usr/local/lib/libtbbbind_2_5.so.3 is not a symbolic link
    /sbin/ldconfig.real: /usr/local/lib/libtbb.so.12 is not a symbolic link
    /sbin/ldconfig.real: /usr/local/lib/libur_adapter_level_zero.so.0 is not a symbolic link
    /sbin/ldconfig.real: /usr/local/lib/libtbbmalloc.so.2 is not a symbolic link
!pip install SpeechRecognition pydub
!apt install ffmpeg -y
    Requirement already satisfied: SpeechRecognition in /usr/local/lib/python3.11/dist-packages (3.14.3)
    Requirement already satisfied: pydub in /usr/local/lib/python3.11/dist-packages (0.25.1)
```

```
Requirement already satisfied: typing-extensions in /usr/local/lib/python3.11/dist-packages (from SpeechRecognition) (4.13.2)
     Reading package lists... Done
     Building dependency tree... Done
     Reading state information... Done
     ffmpeg is already the newest version (7:4.4.2-0ubuntu0.22.04.1).
     0 upgraded, 0 newly installed, 0 to remove and 34 not upgraded.
!pip install PyAudio
Requirement already satisfied: PyAudio in /usr/lib/python3/dist-packages (0.2.11)
from google.colab import files
import speech_recognition as sr
from pydub import AudioSegment
file_name = '/content/Meeting Audio.mp3'
if not file name.endswith('.wav'):
    from pydub import AudioSegment
    audio = AudioSegment.from_file(file_name)
    file_name = "/content/speech.wav"
   audio.export(file_name, format="wav")
import speech recognition as sr
r = sr.Recognizer()
with sr.AudioFile(file_name) as source:
   audio = r.record(source)
   try:
       print("Text:", r.recognize_google(audio))
    except Exception as e:
        print(f"Sorry, could not understand: {e}")
🚁 Text: the first one to the CEO or CFO under Section 33304 subsection 1 no later than May 15th of each year this is the municipal act aft
!pip install --upgrade google-api-python-client google-auth-httplib2 google-auth-oauthlib
    Requirement already satisfied: google-api-python-client in /usr/local/lib/python3.11/dist-packages (2.170.0)
     Requirement already satisfied: google-auth-httplib2 in /usr/local/lib/python3.11/dist-packages (0.2.0)
     Requirement already satisfied: google-auth-oauthlib in /usr/local/lib/python3.11/dist-packages (1.2.2)
     Requirement already satisfied: httplib2<1.0.0,>=0.19.0 in /usr/local/lib/python3.11/dist-packages (from google-api-python-client) (0.22.
     Requirement already satisfied: google-auth!=2.24.0,!=2.25.0,<3.0.0,>=1.32.0 in /usr/local/lib/python3.11/dist-packages (from google-api-
     Requirement already satisfied: google-api-core!=2.0.*,!=2.1.*,!=2.2.*,!=2.3.0,<3.0.0,>=1.31.5 in /usr/local/lib/python3.11/dist-packages
     Requirement already satisfied: uritemplate<5,>=3.0.1 in /usr/local/lib/python3.11/dist-packages (from google-api-python-client) (4.1.1)
     Requirement already satisfied: requests-oauthlib>=0.7.0 in /usr/local/lib/python3.11/dist-packages (from google-auth-oauthlib) (2.0.0)
     Requirement already satisfied: googleapis-common-protos<2.0.0,>=1.56.2 in /usr/local/lib/python3.11/dist-packages (from google-api-core!
     Requirement already satisfied: protobuf!=3.20.0,!=3.20.1,!=4.21.0,!=4.21.1,!=4.21.2,!=4.21.3,!=4.21.4,!=4.21.5,<7.0.0,>=3.19.5 in /usr/l
     Requirement already satisfied: proto-plus<2.0.0,>=1.22.3 in /usr/local/lib/python3.11/dist-packages (from google-api-core!=2.0.*,!=2.1.*
     Requirement already satisfied: requests<3.0.0,>=2.18.0 in /usr/local/lib/python3.11/dist-packages (from google-api-core!=2.0.*,!=2.1.*,!
     Requirement already satisfied: cachetools<6.0,>=2.0.0 in /usr/local/lib/python3.11/dist-packages (from google-auth!=2.24.0,!=2.25.0,<3.0
     Requirement already satisfied: pyasn1-modules>=0.2.1 in /usr/local/lib/python3.11/dist-packages (from google-auth!=2.24.0,!=2.25.0,<3.0.
     Requirement already satisfied: rsa<5,>=3.1.4 in /usr/local/lib/python3.11/dist-packages (from google-auth!=2.24.0,!=2.25.0,<3.0.0,>=1.32
     Requirement already satisfied: pyparsing!=3.0.0,!=3.0.1,!=3.0.2,!=3.0.3,<4,>=2.4.2 in /usr/local/lib/python3.11/dist-packages (from http
     Requirement already satisfied: oauthlib>=3.0.0 in /usr/local/lib/python3.11/dist-packages (from requests-oauthlib>=0.7.0->google-auth-oa
     Requirement already satisfied: pyasn1<0.7.0,>=0.6.1 in /usr/local/lib/python3.11/dist-packages (from pyasn1-modules>=0.2.1->google-auth!
     Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (from requests<3.0.0,>=2.18.0->google
     Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from requests<3.0.0,>=2.18.0->google-api-core!=2
     Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests<3.0.0,>=2.18.0->google-api-c
     Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests<3.0.0,>=2.18.0->google-api-c
import datetime
import os.path
from google.oauth2.credentials import Credentials
from google auth oauthlib.flow import InstalledAppFlow
from googleapiclient.discovery import build
import smtplib
from email.mime.multipart import MIMEMultipart
from email.mime.base import MIMEBase
from email.mime.text import MIMEText
from email import encoders
from datetime import datetime, timedelta
def get_user_input():
    summary = input("Enter event summary (title): ")
    description = input("Enter event description: ")
    start_time = input("Enter start time (YYYY-MM-DD HH:MM): ")
```

```
duration_minutes = int(input("Enter duration in minutes: "))
   attendees = input("Enter attendee emails (comma separated): ")
   attendees_emails = [email.strip() for email in attendees.split(',') if email.strip()]
   return summary, description, start_time, duration_minutes, attendees_emails
def create_ics(summary, description, start_time, duration_minutes):
   # Strip leading/trailing whitespace from start time before parsing
   dtstart = datetime.strptime(start_time.strip(), "%Y-%m-%d %H:%M")
   dtend = dtstart + timedelta(minutes=duration_minutes)
   dtstamp = datetime.utcnow().strftime("%Y%m%dT%H%M%SZ")
   dtstart_str = dtstart.strftime("%Y%m%dT%H%M%SZ")
   dtend_str = dtend.strftime("%Y%m%dT%H%M%SZ")
   ics = f"""BEGIN:VCALENDAR
VERSION: 2.0
PRODID:-//Your Company//Your Product//EN
CALSCALE: GREGORIAN
METHOD: REQUEST
BEGIN: VEVENT
DTSTART:{dtstart str}
DTEND:{dtend_str}
DTSTAMP:{dtstamp}
SUMMARY:{summary}
DESCRIPTION:{description}
END: VEVENT
END: VCALENDAR
   return ics
def send email(sender email, sender password, recipients, subject, body, ics content):
   msg = MIMEMultipart()
   msg['From'] = sender_email
   msg['To'] = ', '.join(recipients)
   msg['Subject'] = subject
   msg.attach(MIMEText(body, 'plain'))
   part = MIMEBase('text', "calendar", method="REQUEST")
   part.set_payload(ics_content)
   encoders.encode_base64(part)
   part.add_header('Content-Disposition', 'attachment; filename="invite.ics"')
   msg.attach(part)
   try:
       with smtplib.SMTP('smtp.gmail.com', 587) as server:
           server.starttls()
           server.login(sender_email, sender_password)
           server.sendmail(sender_email, recipients, msg.as_string())
           print("Calendar invite sent successfully!")
    except smtplib.SMTPAuthenticationError as e:
       print(f"SMTP Authentication Error: {e}. Please check your email address and app password.")
    except Exception as e:
       print(f"An unexpected error occurred: {e}")
if __name__ == "__main__":
    # User input
   summary, description, start_time, duration_minutes, attendees_emails = get_user_input()
   # Your email credentials (use app password for Gmail)
   sender_email = "231fa04942@gmail.com"
   sender_password = "bgum hgml jjxj sqmk" # Replace with your Gmail App Password
   # Create ICS content
   ics content = create ics(summary, description, start time, duration minutes)
   # Send the invite
   send_email(sender_email, sender_password, attendees_emails, f"Invitation: {summary}", body, ics_content)

→ Enter event summary (title): Project Kickoff meeting

     Enter event description: Initial meeting to discuss the new project
     Enter start time (YYYY-MM-DD HH:MM): 2025-05-30 10:00
     Enter duration in minutes: 60
     Enter attendee emails (comma separated): 231fa04956@gmail.com
     Calendar invite sent successfully!
```