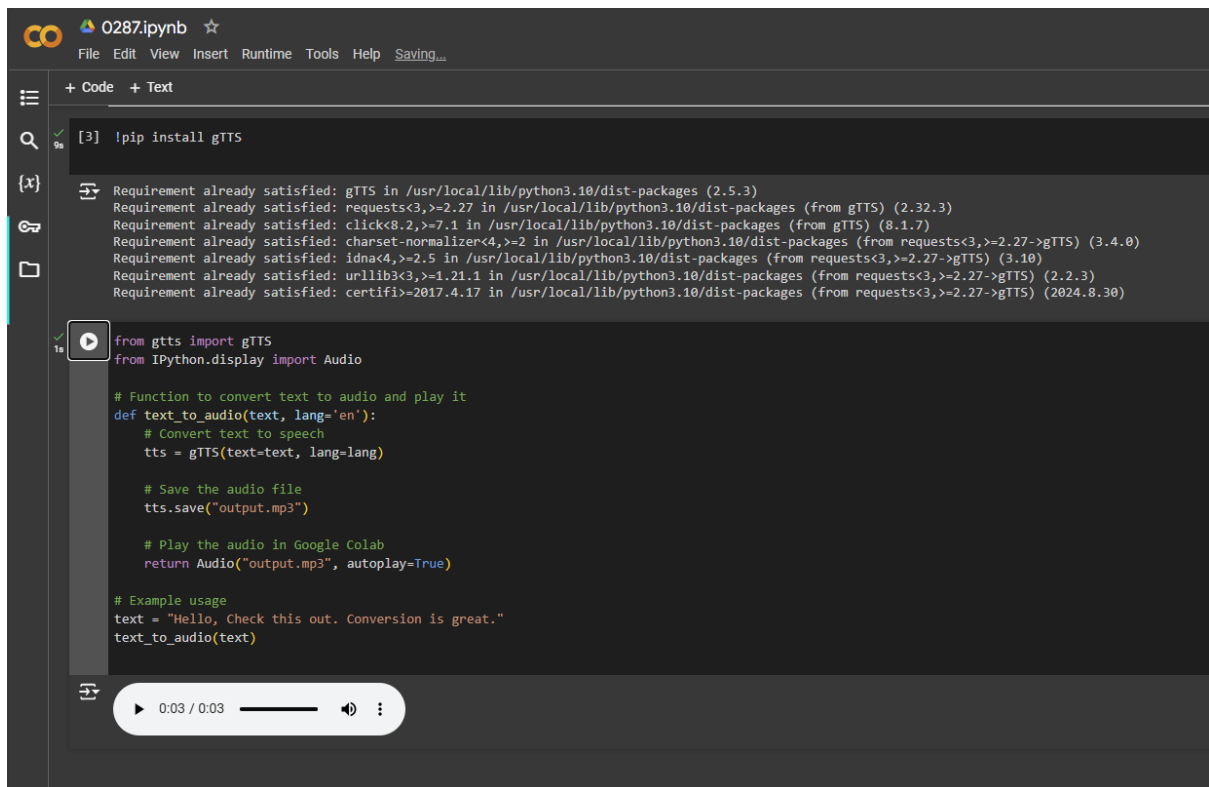


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Text to Speech Program

HU22CSEN0100287



The screenshot shows a Jupyter Notebook titled "0287.ipynb" with a dark theme. The interface includes a top menu bar with "File", "Edit", "View", "Insert", "Runtime", "Tools", "Help", and "Saving...". Below the menu is a toolbar with icons for file operations and a sidebar with icons for code, text, and other elements. The notebook contains two code cells. The first cell, labeled "[3]", contains the command `!pip install gTTS`. The output of this cell shows several requirements already satisfied, including gTTS (2.5.3), requests (3.2.3), click (8.1.7), charset-normalizer (3.4.0), idna (3.10), urllib3 (2.2.3), and certifi (2024.8.30). The second cell contains Python code for a text-to-speech program. It imports gTTS and Audio from the IPython.display module. A function `text_to_audio` is defined, which takes `text` and `lang` as arguments, converts the text to speech using gTTS, saves the audio file as `output.mp3`, and returns an `Audio` object for playback. An example usage is provided at the bottom, where the text "Hello, Check this out. Conversion is great." is passed to the `text_to_audio` function. At the bottom of the notebook, there is an audio player showing a duration of 0:03 / 0:03.

```
[3] !pip install gTTS

Requirement already satisfied: gTTS in /usr/local/lib/python3.10/dist-packages (2.5.3)
Requirement already satisfied: requests<3,>=2.27 in /usr/local/lib/python3.10/dist-packages (from gTTS) (2.32.3)
Requirement already satisfied: click<8.2,>=7.1 in /usr/local/lib/python3.10/dist-packages (from gTTS) (8.1.7)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->gTTS) (3.4.0)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->gTTS) (3.10)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->gTTS) (2.2.3)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests<3,>=2.27->gTTS) (2024.8.30)

from gtts import gTTS
from IPython.display import Audio

# Function to convert text to audio and play it
def text_to_audio(text, lang='en'):
    # Convert text to speech
    tts = gTTS(text=text, lang=lang)

    # Save the audio file
    tts.save("output.mp3")

    # Play the audio in Google Colab
    return Audio("output.mp3", autoplay=True)

# Example usage
text = "Hello, Check this out. Conversion is great."
text_to_audio(text)
```