C:\Users\navee\Downloads\GPT_SpeechTest.py • - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

GPT_SpeechTest.py

```python
import speech_recognition as sr
import Levenshtein

def calculate_word_error_rate(hypothesis, reference):
    hypothesis = hypothesis.split()
    reference = reference.split()

    # Use Levenshtein distance to calculate WER
    wer = Levenshtein.distance(' '.join(hypothesis), ' '.join(reference))
    wer_rate = wer / len(reference) * 100

    return wer_rate

def evaluate_transcription_accuracy(audio_file, transcribed_text):
    # Replace this with the actual ground truth for evaluation
    ground_truth = "This is the ground truth text."

    wer_rate = calculate_word_error_rate(transcribed_text, ground_truth)

    print(f"Word Error Rate for '{audio_file}': {wer_rate:.2f}%")

def optimize_transcription_tool(input_audio_path, output_text_path):
    # Initialize the speech recognition object
    recognizer = sr.Recognizer()

    # Load the audio file
    with sr.AudioFile(input_audio_path) as source:
        audio = recognizer.record(source)

    try:
        # Use a speech recognition engine (e.g., Google Web Speech API)
        text = recognizer.recognize_google(audio, language="en-IN")  # Modify language code as needed

        # Evaluate transcription accuracy
        evaluate_transcription_accuracy(input_audio_path, text)

        # Save the transcribed text to an output file
        with open(output_text_path, 'w') as output_file:
            output_file.write(text)
```

Line 39, Column 36 Spaces: 4 Python

C:\Users\navee\Downloads\GPT_SpeechTest.py • - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

GPT_SpeechTest.py

```
            output_file.write(text)

        print("Transcription successful!")
    except sr.UnknownValueError:
        print("Speech Recognition could not understand the audio.")
    except sr.RequestError as e:
        print(f"Could not request results from Google Web Speech API; {e}")

if __name__ == "__main__":
    # Example usage
    audio_file_path = "C:\\Users\\navee\\OneDrive\\Desktop\\Project Transcription\\Python tests\\English_Sample_Input(converted_audio_from_mp3 to wav format).w
    output_text_file_path = "C:\\Users\\navee\\OneDrive\\Desktop\\Project Transcription\\Python tests\\sample_output.txt"

    optimize_transcription_tool(audio_file_path, output_text_file_path)
```

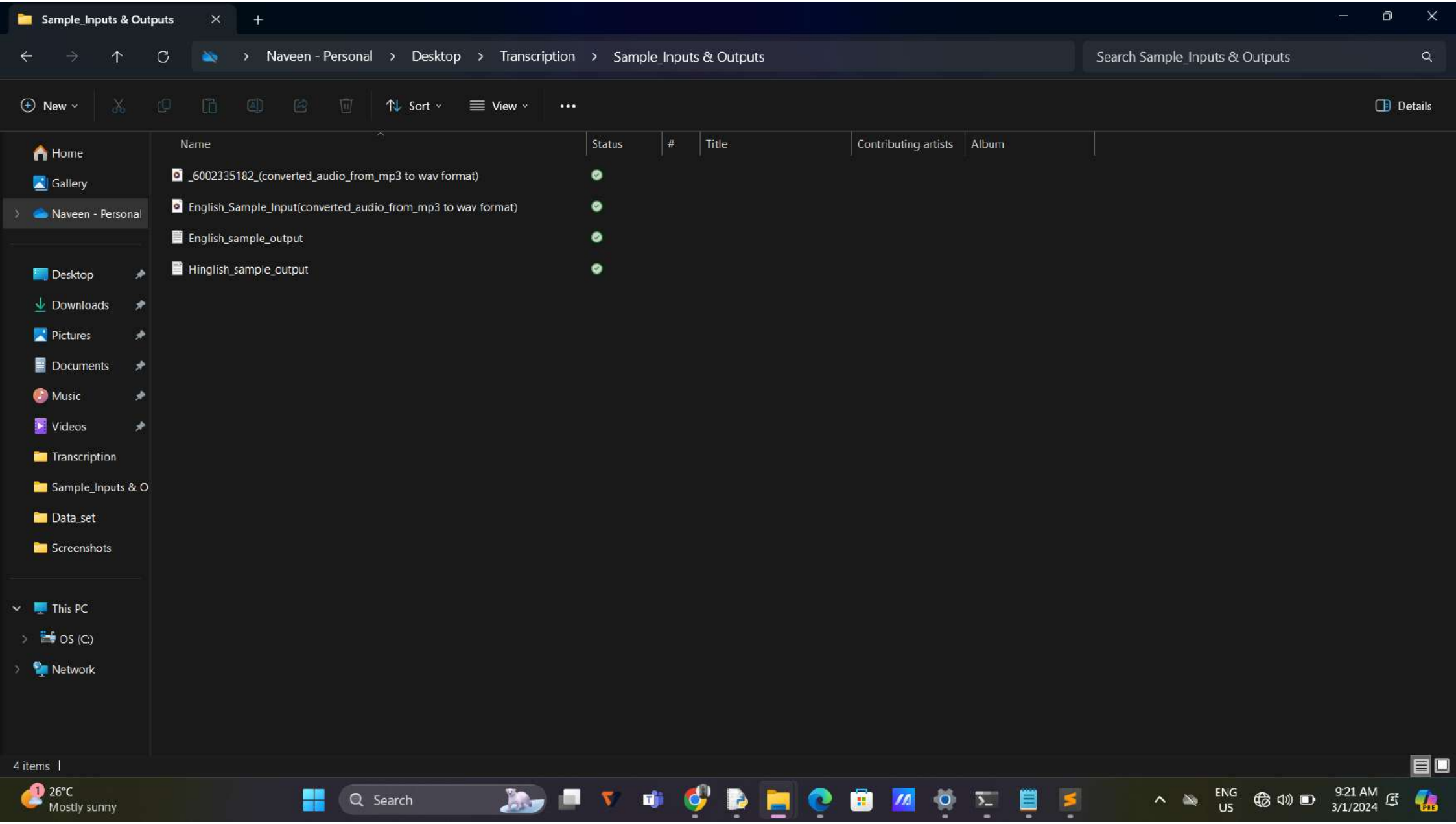
Line 52, Column 72 Spaces: 4 Python

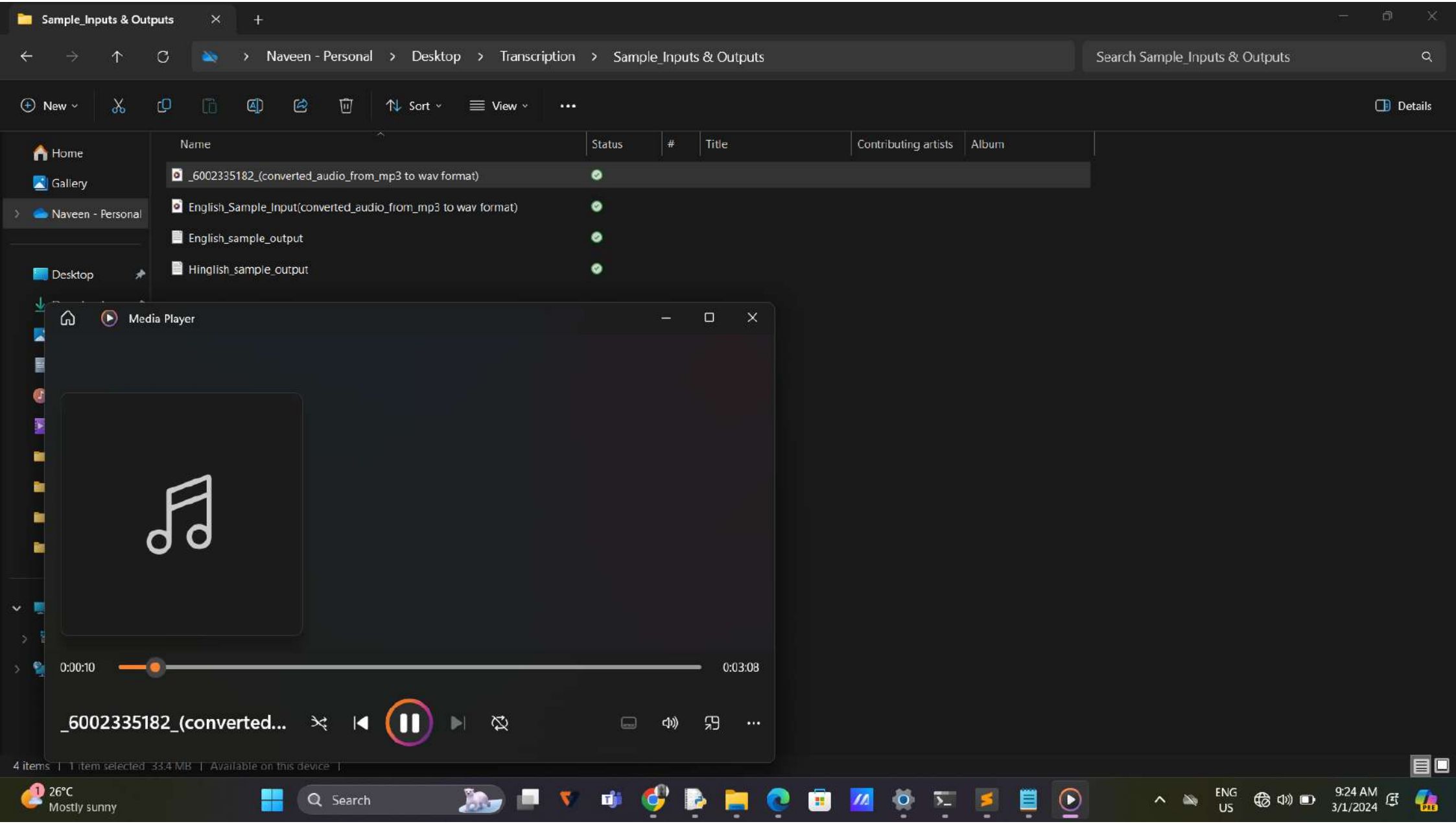
26°C Mostly sunny

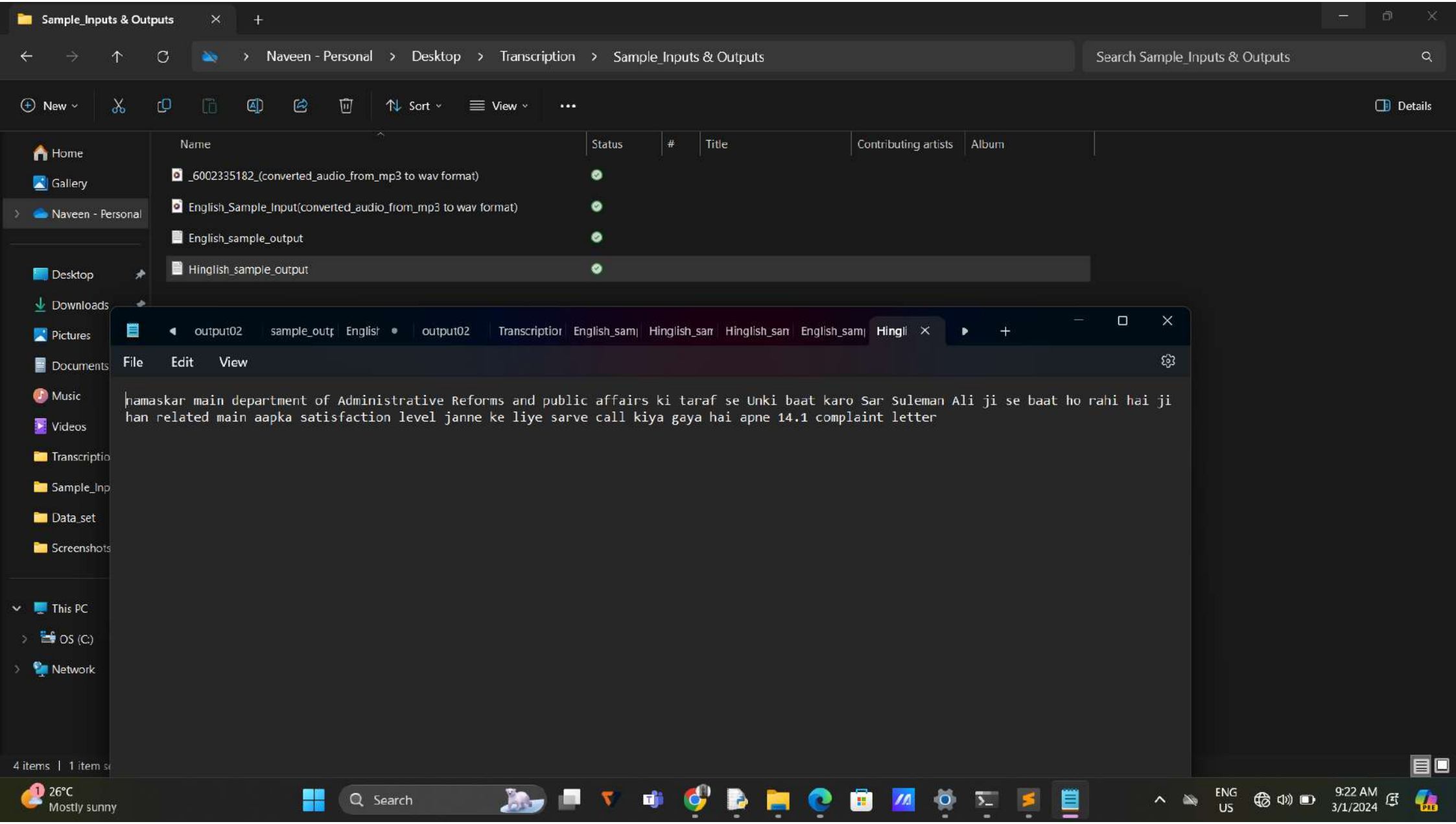
Search

ENG US

9:19 AM 3/1/2024


Sample_Inputs & Outputs
Naveen - Personal
Desktop
Transcription
Sample_Inputs & Outputs
Search Sample_Inputs & Outputs
New
Sort
View
Details
Home
Gallery
Naveen - Personal
Desktop
Downloads
Pictures
Documents
Music
Videos
Transcription
Sample_Inputs & O
Data_set
Screenshots
This PC
OS (C:)
Network
Name
Status
#
Title
Contributing artists
Album
_6002335182_(converted_audio_from_mp3 to wav format)
English_Sample_Input(converted_audio_from_mp3 to wav format)
English_sample_output
Hinglish_sample_output
4 items
26°C
Mostly sunny
Search
ENG
US
9:21 AM
3/1/2024


Sample_Inputs & Outputs
Naveen - Personal
Desktop
Transcription
Sample_Inputs & Outputs
Search Sample_Inputs & Outputs
New
Sort
View
Details
Home
Gallery
Naveen - Personal
Desktop
Name
Status
#
Title
Contributing artists
Album
_6002335182_(converted_audio_from_mp3 to wav format)
English_Sample_Input(converted_audio_from_mp3 to wav format)
English_sample_output
Hinglish_sample_output
Media Player
0:00:10
0:03:08
_6002335182_(converted...
4 items
1 item selected 33.4 MB
Available on this device
26°C
Mostly sunny
Search
ENG
US
9:24 AM
3/1/2024


Sample_Inputs & Outputs
Naveen - Personal > Desktop > Transcription > Sample_Inputs & Outputs
Search Sample_Inputs & Outputs
New
Sort
View
Details
Home
Gallery
Naveen - Personal
Desktop
Downloads
Pictures
Documents
Music
Videos
Transcriptio
Sample_Inp
Data_set
Screenshots
This PC
OS (C:)
Network
Name
Status
#
Title
Contributing artists
Album
_6002335182_(converted_audio_from_mp3 to wav format)
English_Sample_Input(converted_audio_from_mp3 to wav format)
English_sample_output
Hinglish_sample_output
output02
sample_outp
English
output02
Transcriptior
English_sam
Hinglish_sar
Hinglish_san
English_sam
Hingli
File
Edit
View
namaskar main department of Administrative Reforms and public affairs ki taraf se Unki baat karo Sar Suleman Ali ji se baat ho rahi hai ji han related main aapka satisfaction level janne ke liye sarve call kiya gaya hai apne 14.1 complaint letter
4 items | 1 item s
26°C
Mostly sunny
Search
ENG
US
9:22 AM
3/1/2024