# GenAi Project-Unit-1

## Section:- F

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## SRN:- PES2UG23CS350

## 6TH SEM

# Problem Statement:-

(21) Motivational Quote Generator

Project:- Category 6 - Creative Writing and Content (Expansion on Generation)

Goal:- Generate unique motivational quotes based on keywords like Success, Grind, and Peace.

Tech Used:-

- Text generation pipeline from the Transformers library.

- GPT-2 model with high temperature to encourage creative and diverse outputs.

# Abstract:-

This project implements a motivational quote generator using the GPT-2 language model. The system generates unique quotes based on input keywords such as Success, Grind, and Peace. The implementation uses the Hugging Face transformers library with high temperature settings to produce creative and varied outputs.

# What I Understood:-

I learned how text generation works using pre-trained language models. GPT-2 is a transformer-based model that predicts the next words based on patterns it learned during training. By using the pipeline interface from transformers library, I could easily load and use the model without dealing with complex implementation details.

The temperature parameter is important for controlling creativity. Setting it to 1.0 makes the model more random and

creative, producing different outputs each time. Without this, the model would generate similar text repeatedly.

I also understood that controlling output length is necessary. Using max_new_tokens parameter I limited the generated text to about 30 tokens, which keeps the quotes short instead of turning into long paragraphs.

# **What I Built:-**

I built a quote generator that takes three keywords (Success, Grind, Peace) and generates motivational quotes for each one. The system uses:-

- transformers library pipeline for text generation
- GPT-2 model as the base language model
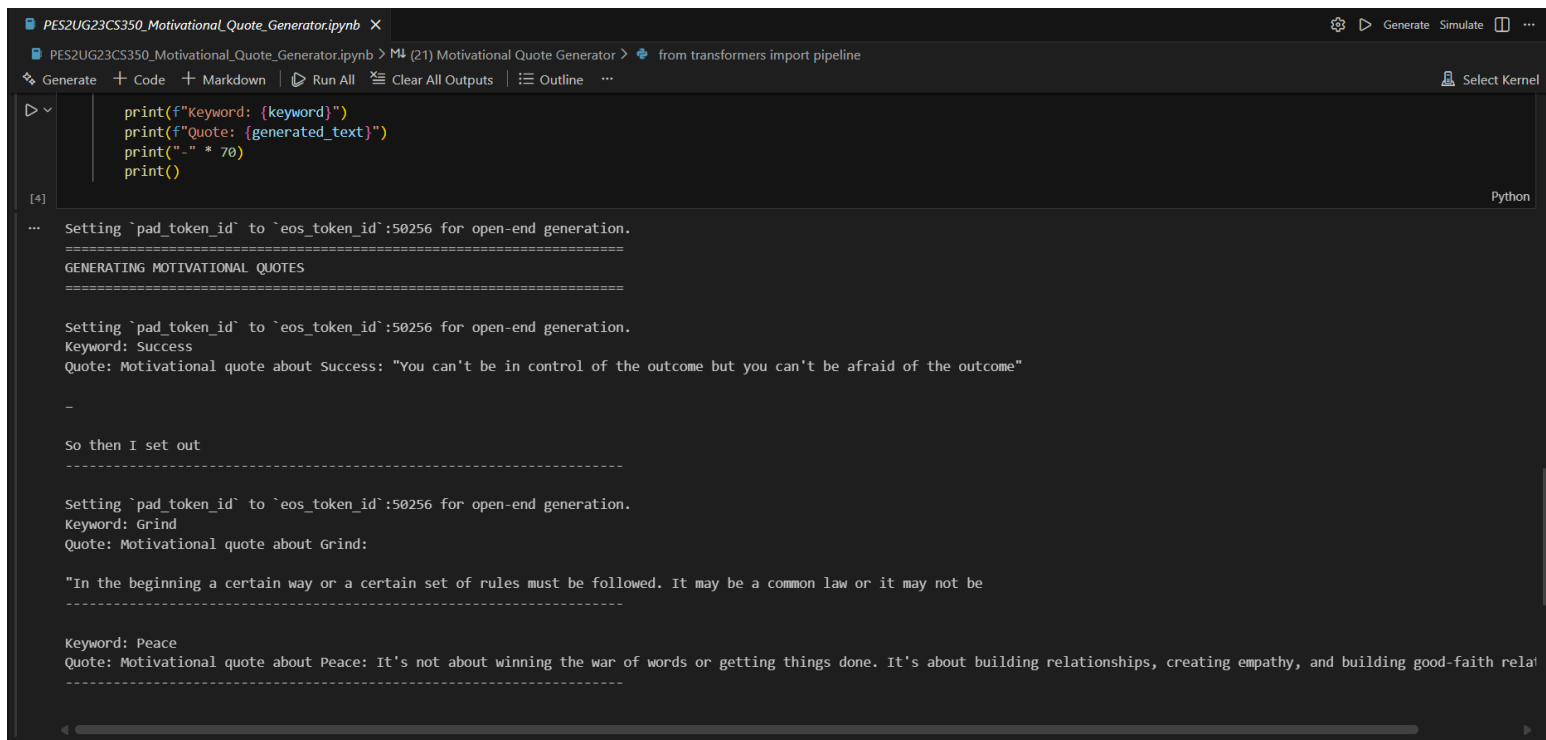- temperature=1.0 for creative outputs

max_new_tokens=30 to keep quotes short

do_sample=True and top_p=0.95 for better variety

The code loops through each keyword, creates a prompt like "Motivational quote about Success:", and generates a unique quote. Each run produces different results because of the high temperature setting.

The results showed that GPT-2 can generate quote-style text based on keywords, though the quality varies since GPT-2 is a general model not specifically trained for motivational quotes. This project helped me understand the basics of text generation and how different parameters affect the output.

# Screenshots:-

PES2UG23CS350_Motivational_Quote_Generator.ipynb > M↓ (21) Motivational Quote Generator > ✦ from transformers import pipeline

✦ Generate  + Code  + Markdown  ▷ Run All  ⥥ Clear All Outputs  ⋮≡ Outline  ⋯                                    ⬚ Select Kernel

```python
        print(f"Keyword: {keyword}")
        print(f"Quote: {generated_text}")
        print("-" * 70)
        print()
```
[4]                                                                                                            Python

```
Setting `pad_token_id` to `eos_token_id`:50256 for open-end generation.
======================================================================
GENERATING MOTIVATIONAL QUOTES
======================================================================

Setting `pad_token_id` to `eos_token_id`:50256 for open-end generation.
Keyword: Success
Quote: Motivational quote about Success: "You can't be in control of the outcome but you can't be afraid of the outcome"

-

So then I set out
----------------------------------------------------------------------

Setting `pad_token_id` to `eos_token_id`:50256 for open-end generation.
Keyword: Grind
Quote: Motivational quote about Grind:

"In the beginning a certain way or a certain set of rules must be followed. It may be a common law or it may not be
----------------------------------------------------------------------

Keyword: Peace
Quote: Motivational quote about Peace: It's not about winning the war of words or getting things done. It's about building relationships, creating empathy, and building good-faith relat
----------------------------------------------------------------------
```
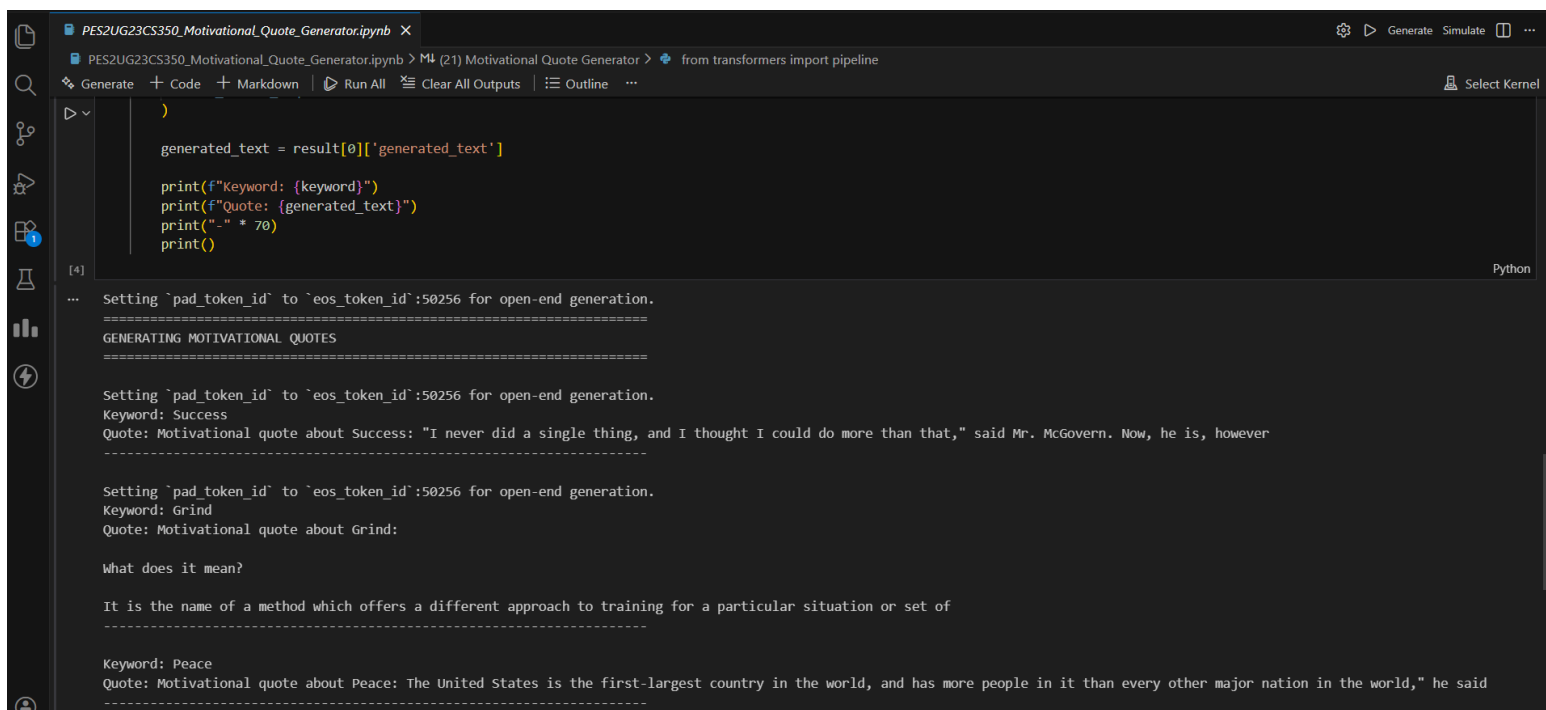
PES2UG23CS350_Motivational_Quote_Generator.ipynb > M↓ (21) Motivational Quote Generator > ✦ from transformers import pipeline

✦ Generate  + Code  + Markdown  ▷ Run All  ⥥ Clear All Outputs  ⋮≡ Outline  ⋯                                    ⬚ Select Kernel

```python
    )

    generated_text = result[0]['generated_text']

    print(f"Keyword: {keyword}")
    print(f"Quote: {generated_text}")
    print("-" * 70)
    print()
```
[4]                                                                                                            Python

```
Setting `pad_token_id` to `eos_token_id`:50256 for open-end generation.
======================================================================
GENERATING MOTIVATIONAL QUOTES
======================================================================

Setting `pad_token_id` to `eos_token_id`:50256 for open-end generation.
Keyword: Success
Quote: Motivational quote about Success: "I never did a single thing, and I thought I could do more than that," said Mr. McGovern. Now, he is, however
----------------------------------------------------------------------

Setting `pad_token_id` to `eos_token_id`:50256 for open-end generation.
Keyword: Grind
Quote: Motivational quote about Grind:

What does it mean?

It is the name of a method which offers a different approach to training for a particular situation or set of
----------------------------------------------------------------------

Keyword: Peace
Quote: Motivational quote about Peace: The United States is the first-largest country in the world, and has more people in it than every other major nation in the world," he said
----------------------------------------------------------------------
```