

```
!pip install transformers
!pip install torch
```

```

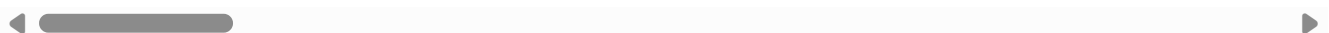
Requirement already satisfied: transformers in /usr/local/lib/python3.11/dist-packages (4.52.4)
Requirement already satisfied: filelock in /usr/local/lib/python3.11/dist-packages (from transformer
Requirement already satisfied: huggingface-hub<1.0,>=0.30.0 in /usr/local/lib/python3.11/dist-packag
Requirement already satisfied: numpy>=1.17 in /usr/local/lib/python3.11/dist-packages (from transfor
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.11/dist-packages (from tran
Requirement already satisfied: pyyaml>=5.1 in /usr/local/lib/python3.11/dist-packages (from transfor
Requirement already satisfied: regex!=2019.12.17 in /usr/local/lib/python3.11/dist-packages (from tr
Requirement already satisfied: requests in /usr/local/lib/python3.11/dist-packages (from transformer
Requirement already satisfied: tokenizers<0.22,>=0.21 in /usr/local/lib/python3.11/dist-packages (fr
Requirement already satisfied: safetensors>=0.4.3 in /usr/local/lib/python3.11/dist-packages (from t
Requirement already satisfied: tqdm>=4.27 in /usr/local/lib/python3.11/dist-packages (from transform
Requirement already satisfied: fsspec>=2023.5.0 in /usr/local/lib/python3.11/dist-packages (from hug
Requirement already satisfied: typing-extensions>=3.7.4.3 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: hf-xet<2.0.0,>=1.1.2 in /usr/local/lib/python3.11/dist-packages (from
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from request
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from r
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from r
Requirement already satisfied: torch in /usr/local/lib/python3.11/dist-packages (2.6.0+cu124)
Requirement already satisfied: filelock in /usr/local/lib/python3.11/dist-packages (from torch) (3.1
Requirement already satisfied: typing-extensions>=4.10.0 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: networkx in /usr/local/lib/python3.11/dist-packages (from torch) (3.5
Requirement already satisfied: Jinja2 in /usr/local/lib/python3.11/dist-packages (from torch) (3.1.6
Requirement already satisfied: fsspec in /usr/local/lib/python3.11/dist-packages (from torch) (2025.
Requirement already satisfied: nvidia-cuda-nvrtc-cu12==12.4.127 in /usr/local/lib/python3.11/dist-pa
Requirement already satisfied: nvidia-cuda-runtime-cu12==12.4.127 in /usr/local/lib/python3.11/dist-
Requirement already satisfied: nvidia-cuda-cupti-cu12==12.4.127 in /usr/local/lib/python3.11/dist-pa
Requirement already satisfied: nvidia-cudnn-cu12==9.1.0.70 in /usr/local/lib/python3.11/dist-package
Requirement already satisfied: nvidia-cublas-cu12==12.4.5.8 in /usr/local/lib/python3.11/dist-packag
Requirement already satisfied: nvidia-cufft-cu12==11.2.1.3 in /usr/local/lib/python3.11/dist-package
Requirement already satisfied: nvidia-curand-cu12==10.3.5.147 in /usr/local/lib/python3.11/dist-pack
Requirement already satisfied: nvidia-cusolver-cu12==11.6.1.9 in /usr/local/lib/python3.11/dist-pack
Requirement already satisfied: nvidia-cusparselt-cu12==12.3.1.170 in /usr/local/lib/python3.11/dist-pa
Requirement already satisfied: nvidia-cusparselt-cu12==0.6.2 in /usr/local/lib/python3.11/dist-packa
Requirement already satisfied: nvidia-nccl-cu12==2.21.5 in /usr/local/lib/python3.11/dist-packages (
Requirement already satisfied: nvidia-nvtx-cu12==12.4.127 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-nvjitlink-cu12==12.4.127 in /usr/local/lib/python3.11/dist-pac
Requirement already satisfied: triton==3.2.0 in /usr/local/lib/python3.11/dist-packages (from torch)
Requirement already satisfied: sympy==1.13.1 in /usr/local/lib/python3.11/dist-packages (from torch)
Requirement already satisfied: mpmath<1.4,>=1.1.0 in /usr/local/lib/python3.11/dist-packages (from s
Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.11/dist-packages (from jinj
Enter a topic for text generation: Climate change and its long-term effects
The following generation flags are not valid and may be ignored: ['early_stopping']. Set `TRANSFORME
The attention_mask and the pad token id were not set. As a consequence, you may observe unexpected b
Setting `pad_token_id` to `eos_token_id`:50256 for open-end generation.

```

 Generated Text:

Climate change and its long-term effects may not be the only concern for the United States.

It is not uncommon for oil and gas producers to try to find ways to "offset" their production from t



```
from transformers import GPT2LMHeadModel, GPT2Tokenizer
import torch
```

```
model_name = "gpt2"
tokenizer = GPT2Tokenizer.from_pretrained(model_name)
model = GPT2LMHeadModel.from_pretrained(model_name)
```

```
device = torch.device("cuda" if torch.cuda.is_available() else "cpu")
model.to(device).eval()
```

```
def generate_text(prompt, max_length=300):
    inputs = tokenizer.encode(prompt, return_tensors="pt").to(device)
    outputs = model.generate(
        inputs,
        max_length=max_length,
        num_return_sequences=1,
        no_repeat_ngram_size=2,
        temperature=0.9,
        top_k=50,
        top_p=0.95,
        do_sample=True,
        early_stopping=True
    )
    generated = tokenizer.decode(outputs[0], skip_special_tokens=True)
    paragraph = generated.strip().replace("\n", " ")

    if paragraph[-1] not in ".!?:":
        paragraph += "."
    return paragraph

user_prompt = input("📝 Enter a topic for text generation: ")
result = generate_text(user_prompt)
print("\n📄 Generated Paragraph:\n")
print(result)
```



📝 Enter a topic for text generation: how to give introduction

The following generation flags are not valid and may be ignored: ['early_stopping']. Set `TRANSFORMER` The attention mask and the pad token id were not set. As a consequence, you may observe unexpected b Setting `pad_token_id` to `eos_token_id`:50256 for open-end generation.



Generated Paragraph:

how to give introduction to the most popular language in the world. If you're new to learning French



Start coding or [generate](#) with AI.