```
!pip install transformers
```

```
Requirement already satisfied: transformers in /usr/local/lib/python3.11/dist-packages (4.51.3)
     Requirement already satisfied: filelock in /usr/local/lib/python3.11/dist-packages (from transformers) (3.18.0)
     Requirement already satisfied: huggingface-hub<1.0,>=0.30.0 in /usr/local/lib/python3.11/dist-packages (from transformers) (0.31.2)
     Requirement already satisfied: numpy>=1.17 in /usr/local/lib/python3.11/dist-packages (from transformers) (2.0.2)
     Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.11/dist-packages (from transformers) (24.2)
     Requirement already satisfied: pyyaml>=\overline{5}.1 in /usr/local/lib/python3.11/dist-packages (from transformers) (6.0.2)
     Requirement already satisfied: regex!=2019.12.17 in /usr/local/lib/python3.11/dist-packages (from transformers) (2024.11.6)
     Requirement already satisfied: requests in /usr/local/lib/python3.11/dist-packages (from transformers) (2.32.3)
     Requirement already satisfied: tokenizers<0.22,>=0.21 in /usr/local/lib/python3.11/dist-packages (from transformers) (0.21.1)
     Requirement already satisfied: safetensors>=0.4.3 in /usr/local/lib/python3.11/dist-packages (from transformers) (0.5.3)
     Requirement already satisfied: tqdm>=4.27 in /usr/local/lib/python3.11/dist-packages (from transformers) (4.67.1)
     Requirement already satisfied: fsspec>=2023.5.0 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub<1.0,>=0.30.0->trans
     Requirement already satisfied: typing-extensions>=3.7.4.3 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub<1.0,>=0.
     Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (from requests->transformers) (3
     Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from requests->transformers) (3.10)
     Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests->transformers) (2.4.0)
     Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests->transformers) (2025.4.2
from transformers import pipeline
a=pipeline("sentiment-analysis")
    No model was supplied, defaulted to distilbert/distilbert-base-uncased-finetuned-sst-2-english and revision 714eb0f (https://huggin
     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 :
     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(
     config.json: 100%
                                                             629/629 [00:00<00:00, 27.3kB/s]
     Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back to regular HTTP download. For better p
     WARNING:huggingface_hub.file_download:Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back
                                                                   268M/268M [00:02<00:00 73 9MB/s]
     model safetensors: 100%
                                                                      48.0/48.0 [00:00<00:00, 593B/s]
     tokenizer_config.json: 100%
                                                            232k/232k [00:00<00:00, 2.81MB/s]
     vocab.txt: 100%
     Device set to use cpu
text=input("Enter the text:")
print(a(text))
     Enter the text:i love this
     [{'label': 'POSITIVE', 'score': 0.9998819828033447}]
gen=pipeline('text-generation')
     No model was supplied, defaulted to openai-community/gpt2 and revision 607a30d (https://huggingface.co/openai-community/gpt2).
     Jsing a pipeline without specifying a model name and revision in production is not recommended.
     config.json: 100%
                                                              665/665 [00:00<00:00, 39.4kB/s]
     (et Storage is enabled for this repo, but the 'hf xet' package is not installed. Falling back to regular HTTP download. For better p
     WARNING:huggingface_hub.file_download:Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back
     model.safetensors: 100%
                                                                   548M/548M [00:02<00:00, 222MB/s]
     generation_config.json: 100%
                                                                       124/124 [00:00<00:00, 7.09kB/s]
     tokenizer config.json: 100%
                                                                      26.0/26.0 [00:00<00:00, 2.05kB/s]
     vocab.json: 100%
                                                              1.04M/1.04M [00:00<00:00, 16.5MB/s]
     merges.txt: 100%
                                                             456k/456k [00:00<00:00, 3.73MB/s]
     tokenizer.ison: 100%
                                                                1.36M/1.36M [00:00<00:00, 5.60MB/s]
     Device set to use cpu
text=input("Enter the text: ")
t=gen(text,max_length=200)
    Enter the text: hi i am cherry
     Truncation was not explicitly activated but `max_length` is provided a specific value, please use `truncation=True` to explicitly tr
     Setting 'pad_token_id' to 'eos_token_id':50256 for open-end generation.
```

```
print(t[0].get('generated_text'))
→ hi i am cherry
        Terrified I am not one of those people who is willing to eat cake, but one of those people will eat you a cake, which you have not c
        Terrified I am glad there are four of them. One is my favorite and one is my bad. I need my cake done better than his and he will.
        Terrified I am glad there are four of them. One is my favorite and one is my bad. I need my cake done better than his and he will.
        Terrified I am sure there are many of you reading what I am about to say. However, I want to apologize to people who feel like I am
        Terrified Many of you were not aware that I was doing this, however, you were there for me.
        Terrified I did not know. While I was doing this I was being told I am
n=pipeline('ner')
No model was supplied, defaulted to dbmdz/bert-large-cased-finetuned-conll03-english and revision 4c53496 (https://huggingface.co/dl
        Using a pipeline without specifying a model name and revision in production is not recommended.
                                                                                               998/998 [00:00<00:00, 55.7kB/s]
        Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back to regular HTTP download. For better package is not installed.
        WARNING:huggingface_hub.file_download:Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back
                                                                                                        1.33G/1.33G [00:10<00:00, 223MB/s]
        Some weights of the model checkpoint at dbmdz/bert-large-cased-finetuned-conll03-english were not used when initializing BertForToke
        - This IS expected if you are initializing BertForTokenClassification from the checkpoint of a model trained on another task or with
        - This IS NOT expected if you are initializing BertForTokenClassification from the checkpoint of a model that you expect to be exact
        tokenizer config.json: 100%
                                                                                                            60.0/60.0 [00:00<00:00, 5.12kB/s]
        vocab txt: 100%
                                                                                              213k/213k [00:00<00:00. 14.6MB/s]
        Device set to use cpu
text=input("Enter the text: ")
result=n(text)
result
      Enter the text: hi i am quuen of seoul
qa = pipeline('question-answering')
       No model was supplied, defaulted to distilbert/distilbert-base-cased-distilled-squad and revision 564e9b5 (<a href="https://huggingface.co/distilled-squad">https://huggingface.co/distilled-squad</a> and revision 564e9b5 (<a href="https://huggingface.co/distilled-squad</a> and revision 564e9b5 (<a href="https://huggingface.co/distilled
        Using a pipeline without specifying a model name and revision in production is not recommended.
        config.json: 100%
                                                                                               473/473 [00:00<00:00, 31.4kB/s]
        Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back to regular HTTP download. For better p
        WARNING:huggingface_hub.file_download:Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back
                                                                                                         261M/261M [00:01<00:00, 154MB/s]
        model.safetensors: 100%
        tokenizer_config.json: 100%
                                                                                                             49.0/49.0 [00:00<00:00, 2.55kB/s]
        vocab.txt: 100%
                                                                                              213k/213k [00:00<00:00, 10.4MB/s]
                                                                                                   436k/436k [00:00<00:00, 24.0MB/s]
        tokenizer.ison: 100%
        Device set to use cpu
c = '''Bity boght some butter, but the butter was bitter butter. So, Bitty bought some better butter, to make the bitter butter better''
q = "what does Bitty bought?"
result = qa({'question' :q ,'context' : c})
print(result)
🕁 /usr/local/lib/python3.11/dist-packages/transformers/pipelines/question_answering.py:390: FutureWarning: Passing a list of SQuAD exa
           warnings.warn(
        {'score': 0.5847614407539368, 'start': 75, 'end': 93, 'answer': 'some better butter'}
c ='''Ravi has three apples. He gives one to his sister and one to his friend. Now, Ravi has only one apple left. If he had five apples,
q = "How many apples does Ravi have now?"
result = qa({'question' :q ,'context' : c})
print(result)
```

```
→ {'score': 0.48860639333724976, 'start': 92, 'end': 95, 'answer': 'one'}
s = pipeline('summarization')
    No model was supplied, defaulted to sshleifer/distilbart-cnn-12-6 and revision a4f8f3e (https://huggingface.co/sshleifer/distilbart
     Using a pipeline without specifying a model name and revision in production is not recommended.
                                                                1.80k/1.80k [00:00<00:00, 80.7kB/s]
                                                                      1.22G/1.22G [00:12<00:00, 103MB/s]
     pytorch model.bin: 100%
     model.safetensors: 75%
                                                                      912M/1.22G [00:45<00:03, 93.5MB/s]
     tokenizer_config.json: 100%
                                                                        26.0/26.0 [00:00<00:00, 887B/s]
     vocab.json: 100%
                                                                899k/899k [00:00<00:00 4 59MB/s]
                                                                456k/456k [00:00<00:00, 3.21MB/s]
     merges.txt: 100%
     Device set to use cou
t ='''On a sunny morning, Priya decided to visit the botanical garden, which opens at 9:00 AM and closes at 5:00 PM. She arrived exactly
 giving herself plenty of time to explore. The garden has over 1,200 species of plants, including rare orchids, towering bamboo, and med
 As she walked along the gravel path, she noticed a group of school children, probably around 30 in number, being guided by a teacher. (
  exclaimed, "Look! That's the rose that changes color!" - pointing at a unique hybrid flower. Priya smiled, noting how nature sparked (
  minds. She spent nearly three hours there, taking photographs, making notes, and enjoying the peaceful ambiance. Before leaving, she bo
  potted bonsai for 350 from the garden's eco-shop. It was the perfect reminder of her day among the greens. As she exited the garden 350
  she felt refreshed and grateful for such a beautiful experience.''
result=s(t)
result[0].get('summary_text')
    ' The botanical garden has over 1,200 species of plants, including rare orchids, towering bamboo, and medicinal herbs . Priya spent
     nearly three hours there, taking photographs, making notes, and enjoying the peaceful ambiance . Before leaving, she bought a small
u =pipeline('fill-mask')
    No model was supplied, defaulted to distilbert/distilroberta-base and revision fb53ab8 (https://huggingface.co/distilbert/distilrobert
     Using a pipeline without specifying a model name and revision in production is not recommended.
                                                                480/480 [00:00<00:00, 37.1kB/s]
     Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back to regular HTTP download. For better package is not installed.
     WARNING: huggingface_hub.file_download: Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back
     model.safetensors: 100%
                                                                      331M/331M [00:23<00:00, 27.8MB/s]
     Some weights of the model checkpoint at distilbert/distilroberta-base were not used when initializing RobertaForMaskedLM: ['roberta
     - This IS expected if you are initializing RobertaForMaskedLM from the checkpoint of a model trained on another task or with another
     - This IS NOT expected if you are initializing RobertaForMaskedLM from the checkpoint of a model that you expect to be exactly ident
     tokenizer_config.json: 100%
                                                                        25.0/25.0 [00:00<00:00, 464B/s]
     vocab.json: 100%
                                                                899k/899k [00:00<00:00, 10.1MB/s]
                                                                456k/456k [00:00<00:00, 3.54MB/s]
     merges.txt: 100%
     tokenizer.ison: 100%
                                                                   1.36M/1.36M [00:00<00:00, 19.0MB/s]
     Device set to use cpu
result = u("I'm teaching <mask> the board")
result
    [{'score': 0.4070245325565338,
       'token': 420,
'token_str': ' across',
'sequence': "I'm teaching across the board"},
      {'score': 0.2445068210363388,
       'token': 15,
       'token_str': ' on',
'sequence': "I'm teaching on the board"},
      {'score': 0.13470087945461273,
       'token': 160,
'token_str': ' off',
'sequence': "I'm teaching off the board"},
      {'score': 0.04219989851117134,
        'token': 23,
       'token_str': ' at',
       'sequence': "I'm teaching at the board"},
      {'score': 0.02144746668636799,
        'token': 13,
        'token str': ' for',
       'sequence': "I'm teaching for the board"}]
Start coding or generate with AI.
                                                               + Code
                                                                           + Text
```

Start coding or generate with AI.

Start coding or generate with AI.