```
from transformers import pipeline
text2text_generator = pipeline("text2text-generation")
text2text_generator("question: What is 42 ? context: 42 is the answer to life, the universe and everything")
[{'generated text': 'the answer to life, the universe and everything'}]
text2text_generator("translate from English to French: I'm very happy")
[{'generated_text': 'Je suis très heureux'}]
No model was supplied, defaulted to google-t5/t5-base and revision a9723ea (<a href="https://huggingface.co/google-t5/t5-base">https://huggingface.co/google-t5/t5-base</a>).
     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 secre
     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%
                                                              1.21k/1.21k [00:00<00:00, 44.6kB/s]
     Xet Storage is enabled for this repo, but the 'hf xet' package is not installed. Falling back to regular HTTP download. For better perfc
     WARNING:huggingface_hub.file_download:Xet Storage is enabled for this repo, but the 'hf_xet' package is not installed. Falling back to r
     model.safetensors: 100%
                                                                     892M/892M [00:11<00:00, 25.8MB/s]
     generation_config.json: 100%
                                                                        147/147 [00:00<00:00, 10.6kB/s]
     spiece.model: 100%
                                                                792k/792k [00:00<00:00, 11.0MB/s]
     tokenizer.json: 100%
                                                                 1.39M/1.39M [00:00<00:00, 13.7MB/s]
     Device set to use cpu
     [{'generated_text': 'Je suis très heureux'}]
from huggingface_hub import login
login(token="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")
from transformers import pipeline
generator = pipeline('text-generation', model='EleutherAI/gpt-neo-1.3B')
prompt="what is AI"
res=generator(prompt, max_length=150,temperature=0.9)
print(res[0]['generated text'])
    /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 secre
     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%
                                                               1.35k/1.35k [00:00<00:00, 137kB/s]
     model.safetensors: 100%
                                                                     5.31G/5.31G [00:21<00:00, 255MB/s]
     tokenizer_config.json: 100%
                                                                       200/200 [00:00<00:00, 28.7kB/s]
     vocab.json: 100%
                                                               798k/798k [00:00<00:00, 12.1MB/s]
                                                              456k/456k [00:00<00:00, 24.5MB/s]
     merges.txt: 100%
     special_tokens_map.json: 100%
                                                                          90.0/90.0 [00:00<00:00, 13.8kB/s]
     Device set to use cpu
     Truncation was not explicitly activated but `max_length` is provided a specific value, please use `truncation=True` to explicitly truncation
     Setting `pad_token_id` to `eos_token_id`:50256 for open-end generation.
     what is AI, and is it a good idea?
     I will start out by stating that I am not claiming AI will kill our existence. AI will, though, do a lot of bad things for humanity as a
     The bad AI
     For most humans it was inevitable that AI would be used in some way to our detriment. We have to consider how AI will ultimately affect
pip install diffusers

→ Collecting diffusers

       Downloading diffusers-0.32.2-py3-none-any.whl.metadata (18 kB)
     Requirement already satisfied: importlib-metadata in /usr/lib/python3/dist-packages (from diffusers) (4.6.4)
     Requirement already satisfied: filelock in /usr/local/lib/python3.11/dist-packages (from diffusers) (3.18.0)
     Requirement already satisfied: huggingface-hub>=0.23.2 in /usr/local/lib/python3.11/dist-packages (from diffusers) (0.30.1)
     Requirement already satisfied: numpy in /usr/local/lib/python3.11/dist-packages (from diffusers) (2.0.2)
```

```
Requirement already satisfied: regex!=2019.12.17 in /usr/local/lib/python3.11/dist-packages (from diffusers) (2024.11.6)
     Requirement already satisfied: requests in /usr/local/lib/python3.11/dist-packages (from diffusers) (2.32.3)
     Requirement already satisfied: safetensors>=0.3.1 in /usr/local/lib/python3.11/dist-packages (from diffusers) (0.5.3)
     Requirement already satisfied: Pillow in /usr/local/lib/python3.11/dist-packages (from diffusers) (11.1.0)
     Requirement already satisfied: fsspec>=2023.5.0 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.23.2->diffusers) (20
     Requirement already satisfied: packaging>=20.9 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.23.2->diffusers) (24.
     Requirement already satisfied: pyyaml>=5.1 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.23.2->diffusers) (6.0.2)
     Requirement already satisfied: tqdm>=4.42.1 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.23.2->diffusers) (4.67.1
     Requirement already satisfied: typing-extensions>=3.7.4.3 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.23.2->diff
     Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (from requests->diffusers) (3.4.1)
     Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from requests->diffusers) (3.10)
     Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests->diffusers) (2.3.0)
     Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests->diffusers) (2025.1.31)
     Downloading diffusers-0.32.2-py3-none-any.whl (3.2 MB)
                                               - 3.2/3.2 MB 30.3 MB/s eta 0:00:00
     Installing collected packages: diffusers
     Successfully installed diffusers-0.32.2
import torch
from diffusers import StableDiffusionPipeline, EulerDiscreteScheduler
from PIL import Image
model_id = "stabilityai/stable-diffusion-2"
scheduler = EulerDiscreteScheduler.from_pretrained(model_id, subfolder="scheduler")
pipe = StableDiffusionPipeline.from_pretrained(model_id, scheduler=scheduler, torch_dtype=torch.float16)
pipe = pipe.to("cuda")
prompt = input()
image = pipe(prompt).images[0]
new_image = image. resize((500, 500))
display(new_image)
```

/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 secre 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(

scheduler_config.json: 100% 345/345 [00:00<00:00, 37.3kB/s] model_index.json: 100% 537/537 [00:00<00:00, 46.3kB/s] Fetching 12 files: 100% 12/12 [00:32<00:00, 3.06s/it]

1.36G/1.36G [00:20<00:00, 28.0MB/s] model.safetensors: 100%

config.json: 100% 633/633 [00:00<00:00, 53.3kB/s]

vocab.json: 100% 1.06M/1.06M [00:00<00:00, 17.8MB/s]

special_tokens_map.json: 100% 460/460 [00:00<00:00, 12.1kB/s]

merges.txt: 100% 525k/525k [00:00<00:00, 2.56MB/s]

preprocessor_config.json: 100% 342/342 [00:00<00:00, 4.90kB/s] tokenizer_config.json: 100% 824/824 [00:00<00:00, 9.23kB/s]

config.json: 100% 909/909 [00:00<00:00, 13.3kB/s]

3.46G/3.46G [00:31<00:00, 275MB/s] diffusion_pytorch_model.safetensors: 100%

diffusion_pytorch_model.safetensors: 100% 335M/335M [00:09<00:00, 12.9MB/s]

611/611 [00:00<00:00, 7.56kB/s] config.json: 100%

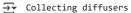
Loading pipeline components...: 100% 6/6 [00:14<00:00, 2.64s/it]

sweet dog

100% 50/50 [00:16<00:00, 3.09it/s]



pip install -U diffusers



Downloading diffusers-0.32.2-py3-none-any.whl.metadata (18 kB)

Requirement already satisfied: importlib-metadata in /usr/lib/python3/dist-packages (from diffusers) (4.6.4)

Requirement already satisfied: filelock in /usr/local/lib/python3.11/dist-packages (from diffusers) (3.18.0)

Requirement already satisfied: huggingface-hub>=0.23.2 in /usr/local/lib/python3.11/dist-packages (from diffusers) (0.30.1)

Requirement already satisfied: numpy in /usr/local/lib/python3.11/dist-packages (from diffusers) (2.0.2)

Requirement already satisfied: regex!=2019.12.17 in /usr/local/lib/python3.11/dist-packages (from diffusers) (2024.11.6)

Requirement already satisfied: requests in /usr/local/lib/python3.11/dist-packages (from diffusers) (2.32.3)

Requirement already satisfied: safetensors>=0.3.1 in /usr/local/lib/python3.11/dist-packages (from diffusers) (0.5.3)

Requirement already satisfied: Pillow in /usr/local/lib/python3.11/dist-packages (from diffusers) (11.1.0)

Requirement already satisfied: fsspec>=2023.5.0 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.23.2->diffusers) (20 Requirement already satisfied: packaging>=20.9 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.23.2->diffusers) (24.

Requirement already satisfied: pyyaml>=5.1 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.23.2->diffusers) (6.0.2)

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Requirement already satisfied: tqdm>=4.42.1 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.23.2->diffusers) (4.67.1
     Requirement already satisfied: typing-extensions>=3.7.4.3 in /usr/local/lib/python3.11/dist-packages (from huggingface-hub>=0.23.2->diff
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     Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests->diffusers) (2025.1.31)
     Downloading diffusers-0.32.2-py3-none-any.whl (3.2 MB)
                                                      - 3.2/3.2 MB 34.0 MB/s eta 0:00:00
     Installing collected packages: diffusers
     Successfully installed diffusers-0.32.2
from transformers import pipeline
pipe = pipeline("image-text-to-text", model="llava-hf/llava-interleave-qwen-0.5b-hf")
messages = [
    {
         "role": "user",
         "content": [
             {"type": "image", "url": "https://www.ilankelman.org/stopsigns/australia.jpg"},
             {"type": "text", "text": "What is shown in this image?"},
         ],
    },
]
outputs = pipe(text=messages, max_new_tokens=60)
outputs[0]["generated_text"]
     config.json: 100%
                                                                    1.25k/1.25k [00:00<00:00, 115kB/s]
      model.safetensors: 100%
                                                                          1.73G/1.73G [00:06<00:00, 281MB/s]
     Sliding Window Attention is enabled but not implemented for `sdpa`; unexpected results may be encountered.
      generation_config.json: 100%
                                                                             126/126 [00:00<00:00, 13.8kB/s]
      processor_config.json: 100%
                                                                             169/169 [00:00<00:00, 19.0kB/s]
      chat_template.json: 100%
                                                                          699/699 [00:00<00:00, 59.9kB/s]
      preprocessor_config.json: 100%
                                                                               393/393 [00:00<00:00, 45.2kB/s]
     Using a slow image processor as `use_fast` is unset and a slow processor was saved with this model. `use_fast=True` will be the default
      tokenizer_config.json: 100%
                                                                            1.60k/1.60k [00:00<00:00, 143kB/s]
      vocab.json: 100%
                                                                   2.78M/2.78M [00:00<00:00, 6.22MB/s]
      merges.txt: 100%
                                                                   1.67M/1.67M [00:00<00:00, 3.95MB/s]
                                                                      7.03M/7.03M [00:01<00:00, 5.33MB/s]
      tokenizer.json: 100%
      added_tokens.json: 100%
                                                                          101/101 [00:00<00:00, 12.2kB/s]
      special_tokens_map.json: 100%
                                                                                367/367 [00:00<00:00, 39.9kB/s]
     Device set to use cuda:0
```