

```

from transformers import pipeline
sentiment_analyzer = pipeline("sentiment-analysis")
text = "I am feeling happy"
sentiment_result = sentiment_analyzer(text)
print("Sentiment analysis:")
print(f"Sentiment: {sentiment_result[0]['label']} (score: {sentiment_result[0]

```

No model was supplied, defaulted to distilbert/distilbert-base-uncased-fi
Using a pipeline without specifying a model name and revision in producti
/usr/local/lib/python3.11/dist-packages/huggingface_hub/utils/_auth.py:94
The secret `HF_TOKEN` does not exist in your Colab secrets.
To authenticate with the Hugging Face Hub, create a token in your setting
You will be able to reuse this secret in all of your notebooks.
Please note that authentication is recommended but still optional to acce
warnings.warn(

config.json: 100% *629/629 [00:00<00:00, 14.4kB/s]*

model.safetensors: 100% *268M/268M [00:02<00:00, 151MB/s]*

tokenizer_config.json: 100% *48.0/48.0 [00:00<00:00, 4.70kB/s]*

vocab.txt: 232k/? [00:00<00:00, 1.57MB/s]

Device set to use cpu

Sentiment analysis:

Sentiment: POSITIVE (score: 1.00)

```

from transformers import pipeline
translator_en_to_fr = pipeline("translation_en_to_fr", model="Helsinki-NLP/opus
text = "I am feeling happy"
translation_result = translator_en_to_fr(text)
print("Translation:")
print(f"Translated text: {translation_result[0]['translation_text']}\n")

```

```
config.json:      1.42k/? [00:00<00:00, 32.3kB/s]

pytorch_model.bin: 100%                               301M/301M [00:02<00:00, 98.3MB/s]

model.safetensors: 100%                               301M/301M [00:02<00:00, 180MB/s]

generation_config.json: 100%                           293/293 [00:00<00:00, 9.66kB/s]

tokenizer_config.json: 100%                             42.0/42.0 [00:00<00:00, 1.55kB/s]

source.spm: 100%                                       778k/778k [00:00<00:00, 9.20MB/s]

target.spm: 100%                                       802k/802k [00:00<00:00, 16.4MB/s]

vocab.json:      1.34M/? [00:00<00:00, 25.6MB/s]

/usr/local/lib/python3.11/dist-packages/transformers/models/marian/tokeni
warnings.warn("Recommended: pip install sacremoses.")
Device set to use cpu
Translation:
Translated text: Je me sens heureux.
```

```
!pip install pytesseract
```

```
Collecting pytesseract
  Downloading pytesseract-0.3.13-py3-none-any.whl.metadata (11 kB)
Requirement already satisfied: packaging>=21.3 in /usr/local/lib/python3.
Requirement already satisfied: Pillow>=8.0.0 in /usr/local/lib/python3.11
Downloading pytesseract-0.3.13-py3-none-any.whl (14 kB)
Installing collected packages: pytesseract
Successfully installed pytesseract-0.3.13
```

```
import pytesseract
from PIL import Image
from transformers import pipeline
```

```
import re
input_image = Image.open('/content/5.1.png')
text_output = pytesseract.image_to_string(input_image, lang='eng').strip()
clean_text = re.sub(r"\s+", " ", text_output)
print(clean_text)
```

```
{import random

def (x)
```

```

return x02 4 40%

def hill_climbing(f, start_point, step_size, max_iterations=100):

    current_point = start_point

    current_value = f(current_point)

    for _ in range(max_iterations):

        neighbors = [current_point - step_size, current_point + step_size]

        neighbor_values = [F(neighbor) for neighbor in neighbors]

        best_value = max(neighbor_values)

        best_neighbor = neighbors[neighbor_values.index(best_value)]

        if best_value > current_value:

            current_point = best_neighbor

            current_value = best_value

        else:

            break

    return current_point, current_value

start_point = random.uniform(2,5)

optimal_x, optimal_value = hill_climbing(f, start_point)

print("#optimal x: (optimal_x)")

print("#Maximum value of f(x): (optimal_value)")

```

```

image = Image.open('/content/5.1.png')
extracted_text = pytesseract.image_to_string(image).strip()

```

```

if not extracted_text:
    print("No text found in the image.")
else:
    print(f"Extracted text: {extracted_text}")
    sentiment_analyzer=pipeline("sentiment-analysis")
    sentiment_result=sentiment_analyzer(extracted_text)[0]
    #print("Sentiment analysis:")
    #print(f"Text: {extracted_text}")
    print(f"Sentiment: {sentiment_result['label']} (score: {sentiment_result['score']})")

```

No model was supplied, defaulted to distilbert/distilbert-base-uncased-1
Using a pipeline without specifying a model name and revision in product
Extracted text: {import random

```
def (x)
```

```
return x02 4 40%
```

```
def hill_climbing(f, start_point, step_size)
```

```
1, max_iterations=100
```

```
current_point = start_point]
```

```
current_value
```

```
 #(current_point)
```

```
for _ in range(max_iterations):
```

```
neighbors
```

```
'current_point - step_size, current_point + step_size]
```

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neighbor_values = [F(neighbor) for neighbor in neighbors]
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best_value = max(neighbor_values)
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best_neighbor = neighbors[neighbor_values.index(best_value)]
```

```
if best_value > current_value:
```

```
'current_point = best_neighbor
```

```
current_value = best_value
```

```
else:  
    break  
    return current_point, current_value  
start_point = candon.unsform(2,5)  
optinal_x, optinal_velue = hill_clinbing(f, etart_point)  
print("#optinal x: (optinal_x)")
```