```
pip install nltk textblob transformers torch pandas matplotlib seaborn
```

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```
import pandas as pd
import nltk
```

```python
from textblob import TextBlob
from transformers import pipeline
import seaborn as sns
import matplotlib.pyplot as plt

nltk.download('punkt')
```

```
[nltk_data] Downloading package punkt to /root/nltk_data...
[nltk_data]   Unzipping tokenizers/punkt.zip.
True
```

```python
data = {
    'user': ['user1', 'user2', 'user3', 'user4'],
    'post': [
        "I love the new features in the latest update! So smooth.",
        "This app keeps crashing. I'm getting frustrated.",
        "Not bad, but it could be better with more customization options.",
        "Absolutely fantastic service. Highly recommend it!"
    ]
}

df = pd.DataFrame(data)
print(df)
```

```
     user                                            post
0  user1  I love the new features in the latest update! ...
1  user2    This app keeps crashing. I'm getting frustrated.
2  user3  Not bad, but it could be better with more cust...
3  user4  Absolutely fantastic service. Highly recommend...
```

```python
def get_sentiment(text):
    blob = TextBlob(text)
    polarity = blob.sentiment.polarity
    if polarity > 0.1:
        return 'Positive'
    elif polarity < -0.1:
        return 'Negative'
    else:
        return 'Neutral'

df['TextBlob_Sentiment'] = df['post'].apply(get_sentiment)


emotion_classifier = pipeline('text-classification', model='j-hartmann/emotion-english-distilrober

def get_emotion(text):
    result = emotion_classifier(text)[0]
    return result['label']

df['Detected_Emotion'] = df['post'].apply(get_emotion)
```

config.json: 100%                                                1.00k/1.00k [00:00<00:00, 73.5kB/s]

pytorch_model.bin: 100%                                          329M/329M [00:06<00:00, 50.6MB/s]

tokenizer_config.json: 100%                                      294/294 [00:00<00:00, 26.7kB/s]

vocab.json: 100%                                                 798k/798k [00:00<00:00, 5.66MB/s]

model.safetensors: 100%                                          329M/329M [00:04<00:00, 91.8MB/s]

merges.txt: 100%                                                 456k/456k [00:00<00:00, 12.1MB/s]

tokenizer.json: 100%                                             1.36M/1.36M [00:00<00:00, 14.7MB/s]

special_tokens_map.json: 100%                                    239/239 [00:00<00:00, 13.7kB/s]

```
Device set to use cpu
/usr/local/lib/python3.11/dist-packages/transformers/pipelines/text_classification.py:106: Use
    warnings.warn(
```
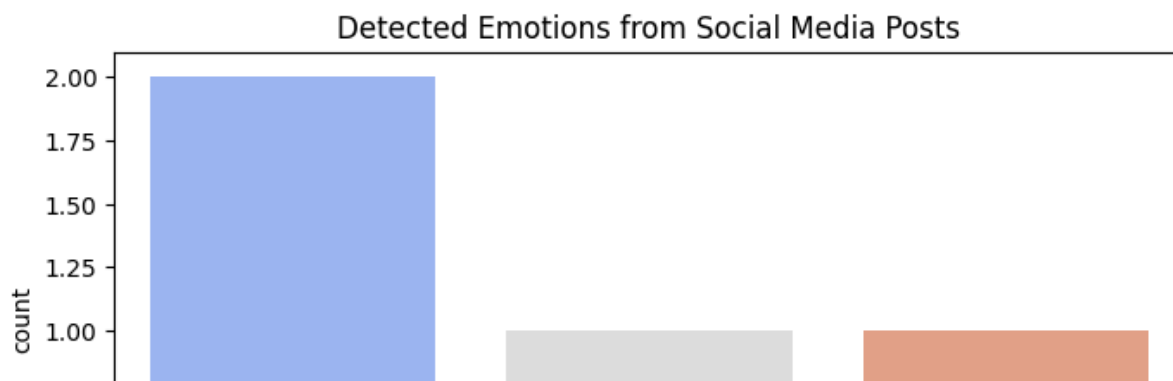
```python
plt.figure(figsize=(8,4))
sns.countplot(x='Detected_Emotion', data=df, palette='coolwarm')
plt.title('Detected Emotions from Social Media Posts')
plt.show()
```

<ipython-input-9-b2e4033779c7>:2: FutureWarning:

Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign

    sns.countplot(x='Detected_Emotion', data=df, palette='coolwarm')



Detected Emotions from Social Media Posts

```python
print(df[['user', 'post', 'TextBlob_Sentiment', 'Detected_Emotion']])
```

```
   user                                              post  \
0  user1  I love the new features in the latest update! ...
1  user2  This app keeps crashing. I'm getting frustrated.
2  user3  Not bad, but it could be better with more cust...
3  user4  Absolutely fantastic service. Highly recommend...

  TextBlob_Sentiment Detected_Emotion
0           Positive              joy
1           Negative            anger
2           Positive          disgust
3           Positive              joy
```