Task 4: Sentiment Analysis of Social Media Posts

In this task, we analyze social media post data to understand how people feel about a certain topic (positive, negative, or neutral).
We will use the TextBlob library to identify sentiment and visualize it using bar charts.

In [6]:
```
import pandas as pd

# Sample social media posts with text
data = {
    'text': [
        'I love this product! It works perfectly.',
        'Worst experience ever, totally disappointed.',
        'Not bad, could be better.',
        'Absolutely amazing! Highly recommend it.',
        'Terrible service, will not return.',
        'It was okay, nothing special.',
        'I am so happy with the quality!',
        'Very poor response from support team.',
        'Great value for money!',
        'Neutral opinion about this brand.'
    ]
}

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

Out[6]:

	text
0	I love this product! It works perfectly.
1	Worst experience ever, totally disappointed.
2	Not bad, could be better.
3	Absolutely amazing! Highly recommend it.
4	Terrible service, will not return.

In [7]:
```
from textblob import TextBlob

def get_sentiment(text):
    polarity = TextBlob(text).sentiment.polarity
    if polarity > 0:
        return 'Positive'
    elif polarity < 0:
        return 'Negative'
    else:
        return 'Neutral'

df['Sentiment'] = df['text'].apply(get_sentiment)
df
```

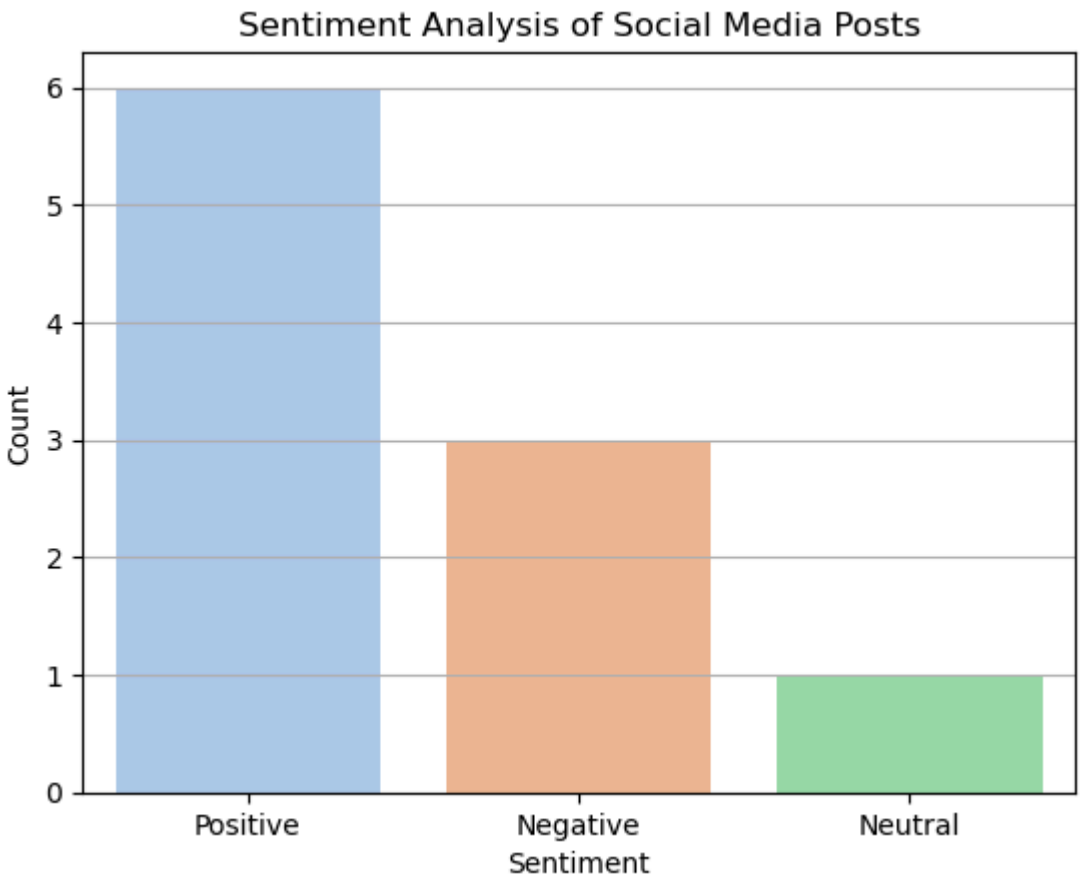
Out[7]:

	text	Sentiment
0	I love this product! It works perfectly.	Positive
1	Worst experience ever, totally disappointed.	Negative
2	Not bad, could be better.	Positive
3	Absolutely amazing! Highly recommend it.	Positive
4	Terrible service, will not return.	Negative
5	It was okay, nothing special.	Positive
6	I am so happy with the quality!	Positive
7	Very poor response from support team.	Negative
8	Great value for money!	Positive
9	Neutral opinion about this brand.	Neutral

In [8]:

```
import seaborn as sns
import matplotlib.pyplot as plt

sns.countplot(data=df, x='Sentiment', palette='pastel')
plt.title('Sentiment Analysis of Social Media Posts')
plt.xlabel('Sentiment')
plt.ylabel('Count')
plt.grid(axis='y')
plt.show()
```



Conclusion

- Most posts are Positive, showing good feedback.
- Some Negative and Neutral posts show different public opinions.
- This helps in understanding how the audience feels overall.

In [ ]: