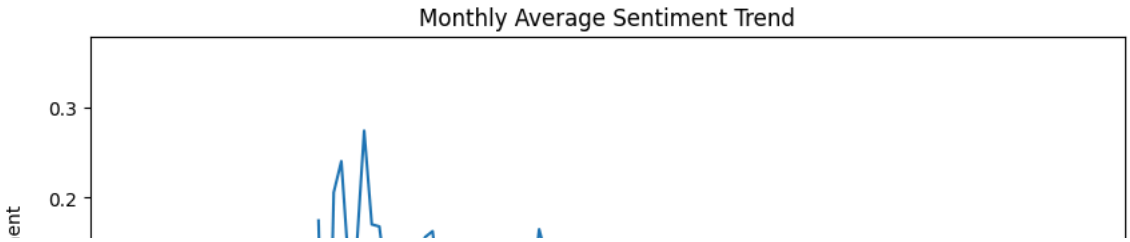
```
import pandas as pd
from textblob import TextBlob

# Load the dataset
data = pd.read_csv('/content/Airline_review.csv')

# Preview the data
data.head()
```

	Unnamed: 0	Airline Name	Overall_Rating	Review_Title	Review Date	Verified	Review	Aircraft	Type Of Traveller	Seat Type	Route	Date Flown	C
0	0	AB Aviation	9	"pretty decent airline"	11th November 2019	True	Moroni to Moheli. Turned out to be a pretty ...	NaN	Solo Leisure	Economy Class	Moroni to Moheli	Nov-19	
1	1	AB Aviation	1	"Not a good airline"	25th June 2019	True	Moroni to Anjouan. It is a very small airline...	E120	Solo Leisure	Economy Class	Moroni to Anjouan	Jun-19	
2	2	AB Aviation	1	"flight was fortunately short"	25th June 2019	True	Anjouan to Dzaoudzi. A very small airline an...	Embraer E120	Solo Leisure	Economy Class	Anjouan to Dzaoudzi	Jun-19	
3	3	Adria Airways	1	"I will never fly again with Adria"	28th September 2019	False	Please do a favor yourself and do not fly wi...	NaN	Solo Leisure	Economy Class	Frankfurt to Pristina	Sep-19	
4	4	Adria Airways	1	"it ruined our last days of holidays"	24th September 2019	True	Do not book a flight with this airline! My fr...	NaN	Couple Leisure	Economy Class	Sofia to Amsterdam via Ljubljana	Sep-19	

```
# Function to calculate sentiment
def calculate_sentiment(text):
    return TextBlob(text).sentiment.polarity

# Apply the function to your reviews column
data['sentiment'] = data['Review'].apply(calculate_sentiment)

# View the sentiment scores
print(data[['Review', 'sentiment']].head())
```

```
                                              Review  sentiment
0    Moroni to Moheli. Turned out to be a pretty ...   0.302222
1   Moroni to Anjouan. It is a very small airline...  -0.077083
2    Anjouan to Dzaoudzi. A very small airline an...   0.070833
3    Please do a favor yourself and do not fly wi...  -0.206250
4   Do not book a flight with this airline! My fr...   0.175000
```

```
import matplotlib.pyplot as plt
import numpy as np
# Assume there's a 'date' column in your dataset; convert it to datetime format
data['Date Flown'] = pd.to_datetime(data['Date Flown'], format='%b-%y', errors='coerce')

# Set date as index
data.set_index('Date Flown', inplace=True)

# Resample data by month and calculate average sentiment
monthly_sentiment = data['sentiment'].resample('M').mean()

plt.figure(figsize=(10, 5))
monthly_sentiment.plot(title='Monthly Average Sentiment Trend')
plt.xlabel('Month')
plt.ylabel('Average Sentiment')
plt.show()
print()

# Airline-specific sentiment trend
airline_sentiment = data.groupby('Airline Name')['sentiment'].mean().sort_values()

airlines = airline_sentiment.sample(n=10, random_state=np.random.RandomState())

# Plotting
airlines.plot(kind='bar', title='Average Sentiment by Airline')
plt.xlabel('Airline')
plt.ylabel('Average Sentiment')
plt.xticks(rotation=45)
plt.show()
```


Monthly Average Sentiment Trend
0.3
0.2