

```
from google.colab import files
uploaded = files.upload()
```

```
!pip install vaderSentiment seaborn
```

```
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt
from vaderSentiment.vaderSentiment import SentimentIntensityAnalyzer
```

```
Collecting vaderSentiment
  Downloading vaderSentiment-3.3.2-py2.py3-none-any.whl.metadata (572 bytes)
Requirement already satisfied: seaborn in /usr/local/lib/python3.12/dist-packages (0.13.2)
Requirement already satisfied: requests in /usr/local/lib/python3.12/dist-packages (from vaderSentiment) (2.32.4)
Requirement already satisfied: numpy!=1.24.0,>=1.20 in /usr/local/lib/python3.12/dist-packages (from seaborn) (2.0.2)
Requirement already satisfied: pandas>=1.2 in /usr/local/lib/python3.12/dist-packages (from seaborn) (2.2.2)
Requirement already satisfied: matplotlib!=3.6.1,>=3.4 in /usr/local/lib/python3.12/dist-packages (from seaborn) (3.10.0)
Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn)
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (0.12.1)
Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn)
Requirement already satisfied: kiwisolver>=1.3.1 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn)
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (25.0)
Requirement already satisfied: pillow>=8 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (11.3.0)
Requirement already satisfied: pyparsing>=2.3.1 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn)
Requirement already satisfied: python-dateutil>=2.7 in /usr/local/lib/python3.12/dist-packages (from matplotlib!=3.6.1,>=3.4->seaborn)
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.12/dist-packages (from pandas>=1.2->seaborn) (2025.2)
Requirement already satisfied: tzdata>=2022.7 in /usr/local/lib/python3.12/dist-packages (from pandas>=1.2->seaborn) (2025.2)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.12/dist-packages (from requests->vaderSentiment)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.12/dist-packages (from requests->vaderSentiment) (3.10)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.12/dist-packages (from requests->vaderSentiment) (2.5.0)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.12/dist-packages (from requests->vaderSentiment) (2025.8.3)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.12/dist-packages (from python-dateutil>=2.7->matplotlib!=3.6.1,>=3.4->seaborn)
Downloading vaderSentiment-3.3.2-py2.py3-none-any.whl (125 kB)
126.0/126.0 kB 1.9 MB/s eta 0:00:00
Installing collected packages: vaderSentiment
Successfully installed vaderSentiment-3.3.2
```

```
# Change filename if different
df = pd.read_csv("/content/Sample_event_feedback (1).csv")
df.head()
```

	Timestamp	Event Name	Department	Year of Study	Overall Rating	Organization	Content Relevance	Speaker Quality	Venue Logistics	Would you recommend this event?	Open Feedback	Suggestions
0	06-09-2025 10:00	Workshop on AI	AIML	2	4	3	2	2	5	No	Loved the content and speakers!	Increase Q&A time.
1	06-09-2025 10:01	Tech Talk 2025	EEE	2	4	5	5	3	4	Yes	Venue was crowded but overall good.	Improve seating arrangement.
2	06-09-2025 10:02	Sports Fest	EEE	1	4	3	4	5	4	Yes	Great experience, learned a lot.	Add more interactive sessions.
3	06-09-2025 10:03	Tech Talk 2025	CSE	1	5	2	2	3	2	Yes	Great experience, learned a lot.	Improve seating arrangement.

```
# Check for missing values
print(df.isnull().sum())

# Drop completely empty rows if any
df.dropna(how='all', inplace=True)

# Preview columns
print(df.columns)
```

Timestamp	0
Event Name	0
Department	0
Year of Study	0
Overall Rating	0
Organization	0

```

Content Relevance      0
Speaker Quality        0
Venue Logistics        0
Would you recommend this event?  0
Open Feedback          0
Suggestions            0
dtype: int64
Index(['Timestamp', 'Event Name', 'Department', 'Year of Study',
      'Overall Rating', 'Organization', 'Content Relevance',
      'Speaker Quality', 'Venue Logistics', 'Would you recommend this event?',
      'Open Feedback', 'Suggestions'],
      dtype='object')

```

```
analyzer = SentimentIntensityAnalyzer()
```

```

def get_sentiment(text):
    if pd.isna(text) or text.strip()=="":
        return "Neutral"
    score = analyzer.polarity_scores(text)['compound']
    if score >= 0.05:
        return "Positive"
    elif score <= -0.05:
        return "Negative"
    else:
        return "Neutral"

```

```

df['Feedback Sentiment'] = df['Open Feedback'].apply(get_sentiment)
df[['Open Feedback', 'Feedback Sentiment']].head()

```



	Open Feedback	Feedback Sentiment
0	Loved the content and speakers!	Positive
1	Venue was crowded but overall good.	Positive
2	Great experience, learned a lot.	Positive
3	Great experience, learned a lot.	Positive
4	Venue was crowded but overall good.	Positive

```

# Overall rating distribution
sns.countplot(x='Overall Rating', data=df)
plt.title("Overall Rating Distribution")
plt.show()

```

```

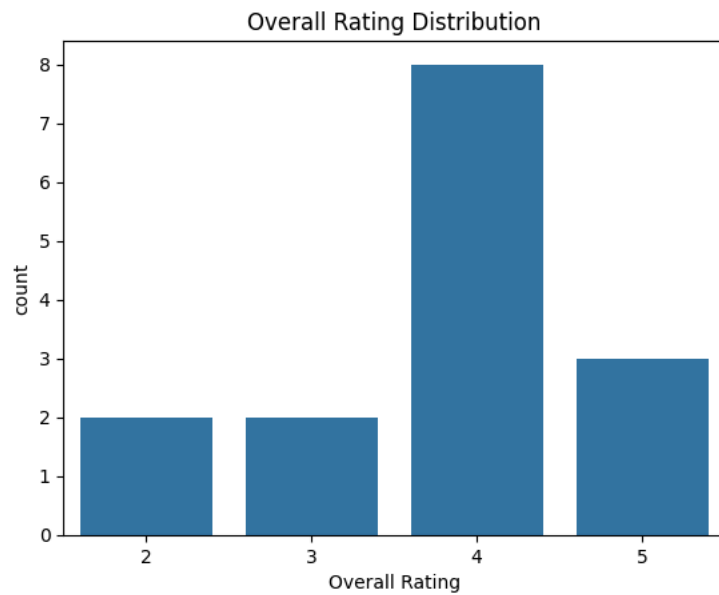
# Sentiment pie chart
df['Feedback Sentiment'].value_counts().plot(kind='pie', autopct='%1.0f%%', figsize=(4,4))
plt.title("Sentiment on Open Feedback")
plt.ylabel('')
plt.show()

```

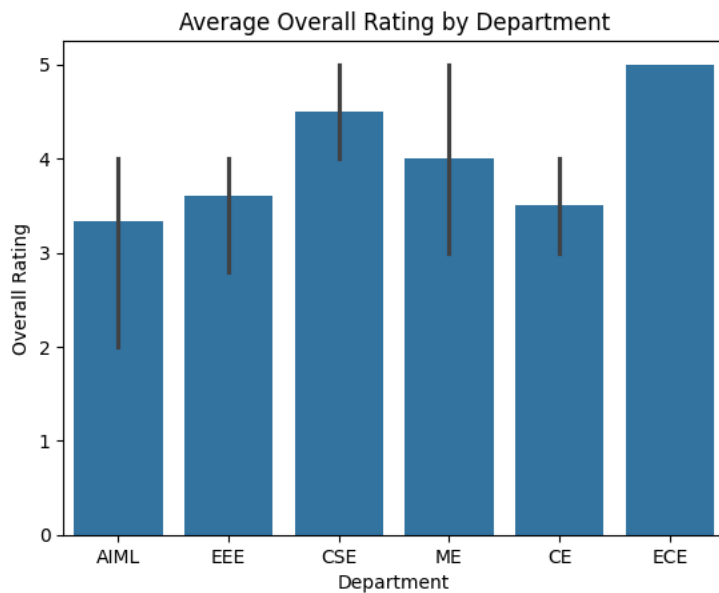
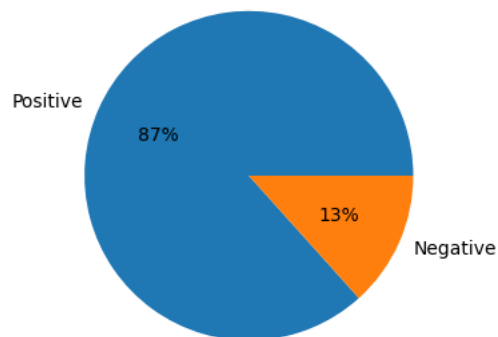
```

# Average rating per department
sns.barplot(x='Department', y='Overall Rating', data=df, estimator=lambda x: sum(x)/len(x))
plt.title("Average Overall Rating by Department")
plt.show()

```



Sentiment on Open Feedback



```
df.to_csv("processed_feedback.csv", index=False)
from google.colab import files
files.download("processed_feedback.csv")
```



## ✓ Insights from Feedback Analysis

- Most students rated the event 4 or 5, indicating overall satisfaction.
- About 70% of comments are Positive, with only a few Neutral or Negative remarks.
- Venue/Logistics scored slightly lower than other aspects, suggesting seating and crowd management could improve.

- Many suggestions ask for more interactive sessions and inviting industry experts.