

## Practical – 4\_2

**Aim: Write a program to compute summary statistics with use of two variability tricks Kurtosis and Skewness in 100 rows of Dataset.**

- Code:

```
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

data_set = pd.read_csv("/content/drive/MyDrive/temp/practical_4_2.csv")
df = pd.DataFrame(data_set)

num_data = df.select_dtypes(include=["int64", "float64"])

stats = {
    "skewness": num_data.skew(),
    "kurtosis": num_data.kurtosis()
}
stats_table = pd.DataFrame(stats)

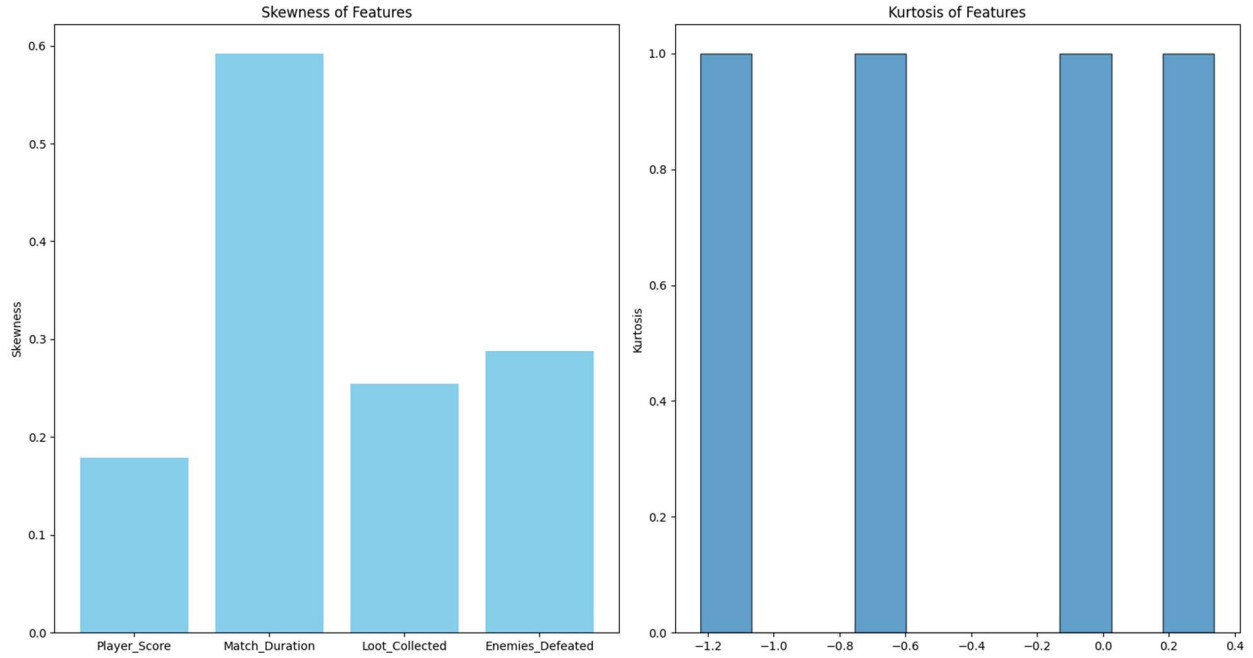
print("Result\n")
print(stats_table)

fig, axes = plt.subplots(1, 2, figsize=(22, 8))
# ! skewness bar chart
axes[0].bar(stats_table.index, stats_table["skewness"], color="skyblue")
axes[0].set_ylabel("Skewness")
axes[0].set_title("Skewness of Features")
axes[0].tick_params(axis="x")

# ! Kurtosis histo Chart
axes[1].hist(stats_table["kurtosis"], bins=10, edgecolor='black', alpha=0.7)
axes[1].set_ylabel("Kurtosis")
axes[1].set_title("Kurtosis of Features")
axes[1].tick_params(axis="x")

plt.tight_layout()
plt.show()
```

- Output:



Faculty Signature: \_\_\_\_\_

Date: \_\_\_\_\_