# **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)

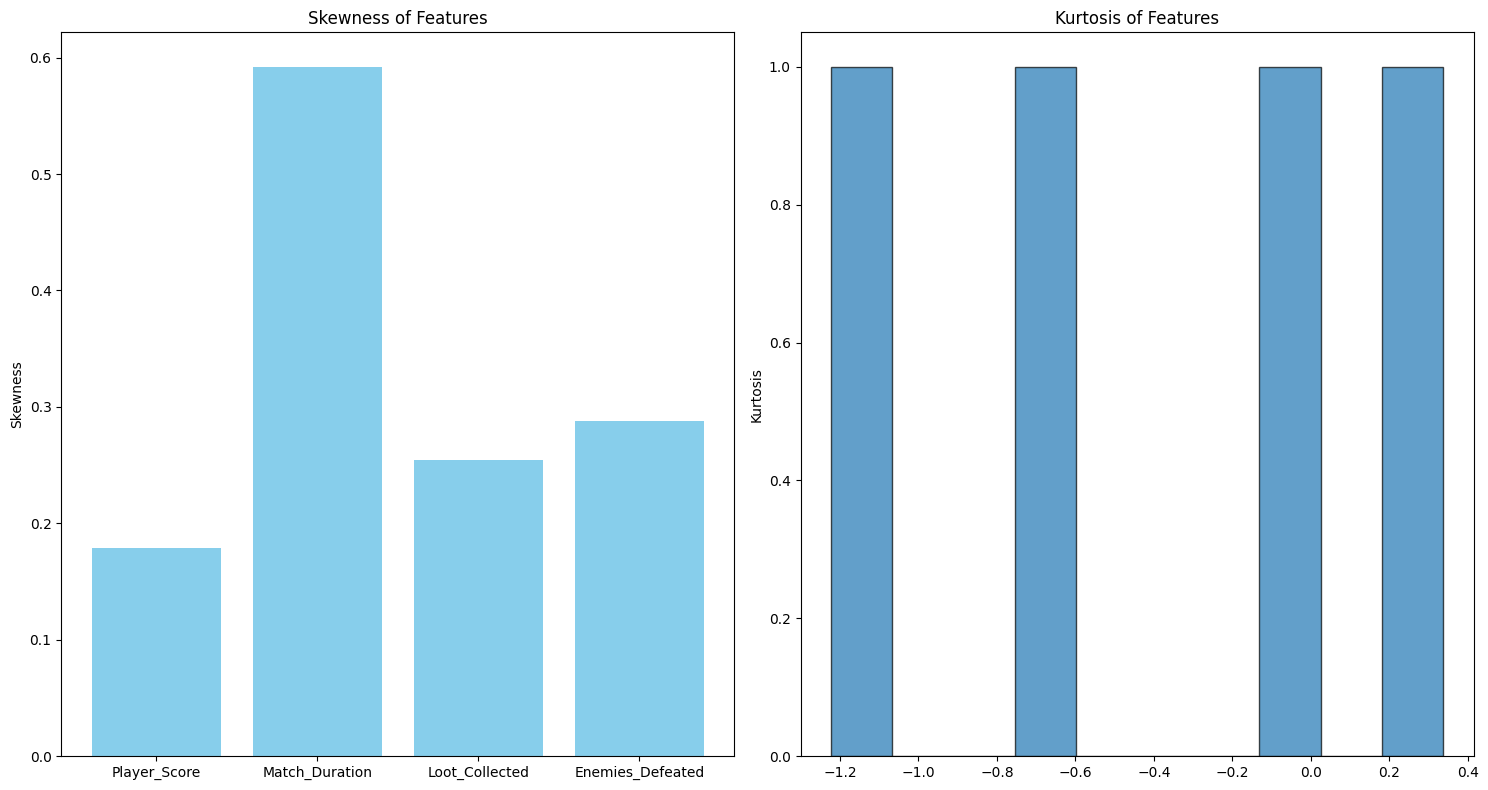
axes[1].set\_ylabel("Kurtosis")

axes[1].set\_title("Kurtosis of Features")

axes[1].tick\_params(axis="x")

plt.tight\_layout()

plt.show()

* Output:

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