

```
import pandas as pd
```

```
df = pd.read_csv('/content/employee_performance.csv')
print("Dataset Head:")
print(df.head())
```

Dataset Head:

| | Employee_ID | Department | Monthly_Salary | Years_of_Experience | \ |
|---|-------------|------------|----------------|---------------------|---|
| 0 | 1 | HR | 115382.10 | 17 | |
| 1 | 2 | HR | 32428.50 | 6 | |
| 2 | 3 | Operations | 48202.18 | 9 | |
| 3 | 4 | IT | 39488.41 | 1 | |
| 4 | 5 | HR | 64898.09 | 6 | |

| | Performance_Score |
|---|-------------------|
| 0 | 10 |
| 1 | 7 |
| 2 | 10 |
| 3 | 4 |
| 4 | 7 |

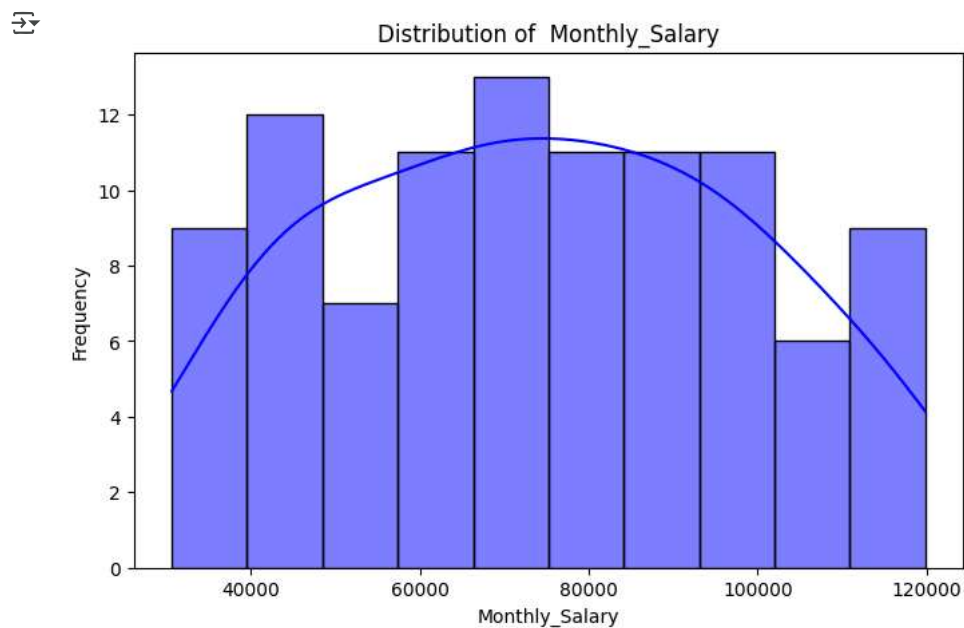
```
import matplotlib.pyplot as plt
import seaborn as sns
```

```
print("Summary Statistics:")
print(df.describe())
```

Summary Statistics:

| | Employee_ID | Monthly_Salary | Years_of_Experience | Performance_Score |
|-------|-------------|----------------|---------------------|-------------------|
| count | 100.000000 | 100.000000 | 100.000000 | 100.000000 |
| mean | 50.500000 | 74155.081700 | 10.240000 | 5.500000 |
| std | 29.011492 | 24765.021112 | 5.778959 | 2.858622 |
| min | 1.000000 | 30634.090000 | 1.000000 | 1.000000 |
| 25% | 25.750000 | 54103.632500 | 6.000000 | 3.000000 |
| 50% | 50.500000 | 73622.835000 | 10.000000 | 6.000000 |
| 75% | 75.250000 | 94087.112500 | 16.000000 | 8.000000 |
| max | 100.000000 | 119817.320000 | 20.000000 | 10.000000 |

```
plt.figure(figsize=(8, 5))
sns.histplot(df['Monthly_Salary'], bins=10, kde=True, color='blue')
plt.title("Distribution of Monthly_Salary")
plt.xlabel("Monthly_Salary")
plt.ylabel("Frequency")
plt.show()
```



```
plt.figure(figsize=(8, 5))
sns.scatterplot(x=df['Performance_Score'], y=df['Monthly_Salary'], hue=df['Years_of_Experience'])
plt.title("Monthly_Salary vs. Performance_Score")
plt.xlabel("Performance_Score")
```

```
plt.ylabel("Monthly_Salary")
plt.show()
```



```
numeric_df = df.select_dtypes(include=['number'])
```

```
correlation_matrix = numeric_df.corr()
plt.figure(figsize=(6, 4))
sns.heatmap(correlation_matrix, annot=True, cmap='coolwarm', fmt=".2f")
plt.title("Correlation Heatmap")
plt.show()
```

