NORMALITY TEST
INFERENTIAL STATISTICS

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Normality Test

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```python
# imports and packages
import pandas as pd
import matplotlib.pyplot as plt
from scipy import stats
```

[ ] Python

Shapiro-Wilk Test

```python
# load dataset
df = pd.read_csv(r"raw\defects-30-sample.csv",delimiter=",")
df
```

[ ] Open 'df' in Data Wrangler — Python

```python
# summary of dataframe
df.info()
```

[ ] Python

```python
# summary of statistics
df.describe()
```

[ ] Python

Data Cleaning

```python
# check for outliers
plt.boxplot(df['Defects'],tick_labels=['Defects'])
plt.show()
```

[ ] Python

```python
# shapiro-wilk test
w_stat, p_value = stats.shapiro(df['Defects'])
```

[ ] Python

Aderson-Darling Test

```python
# load dataset
df = pd.read_csv(r"raw\defects-count.csv",delimiter=",")
df
```

[ ] Open 'df' in Data Wrangler — Python

```python
# summary of dataframe
df.info()
```

[ ] Python

```python
# summary of statistics
df.describe()
```

[ ] Python

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Data Cleaning

```
[ ]
1  # check for outliers
2  plt.boxplot(df['Defects'],tick_labels=['Defects'])
3  plt.show()
```

Python

```
[ ]
1  # anderson-darling statistics
2  a2_stat, critical, alpha = stats.anderson(df['Defects'])
```

Python