

Homework 1

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make changes later

Import Section

```
In [7]: import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
import pandas as pd
import stemgraphic as stg
import statistics
```

Problem 35

Part A

Based on the stem and leaf plot below, we can assume that the median will be about the same as the mean because the plot is well centered.

```
In [16]: # Note that the time is in seconds
data = [389, 356, 359, 363, 375, 424, 325, 394, 402, 373, 373, 370, 364, 366, 364, 325, 339, 393, 392, 369, 375]
arr = np.array(data)
stg.stem_graphic(arr, scale=10, asc=False)
```

```
Out[16]: (<Figure size 540x252 with 1 Axes>, <Axes:>)
```



Part B

The mean and median have been calculated below.

```
In [17]: median = statistics.median(data)
mean = statistics.mean(data)
```

```
print("Median: " + str(median))  
print("Mean: " + str(mean))
```

Median: 369.5

Mean: 370.6923076923077

In []:

In []: