

```
/* Khoong Wei Hao   A0140425U   ST2137   Tutorial 3 Q2 T03 */
```

```
* Q2a;
```

```
data q2a;  
  infile '~/wip.txt' firstobs=2;  
  input time plant;  
run;
```

```
proc univariate data=q2a;  
  class plant;  
  var time;
```

\* From the descriptive statistics outputs, we have for Plant 1: mean=9.382, median=8.515, Q1=7.395, Q3=11.170, minimum=4.42, maximum=21.62, range=17.20, IQR=3.775, variance=15.9812, standard deviation=3.9977.

For Plant 2, mean=11.3535, median=11.96, Q1=7.71, Q3=13.98, minimum=2.33, maximum=27.75, range=23.42, IQR=6.27, variance=26.2774, standard deviation=5.1262.;

```
* Q2b;
```

```
proc univariate data=q2a;  
  class plant;  
  var time;  
  histogram time/ midpoints=1 to 25 by 2;
```

```
proc boxplot data=q2a;  
  plot time*plant;
```

```
* Q2c;
```

\* Yes, there are differences. Plant 1 has a lower mean and median time than Plant 2. In particular, the spread of the data for Plant 1 is also lower than that of Plant 2, and also its interquartile range.