Practical 6

Create Boxplot and side by side stem and graph of following data

 $A = \{59,72,73,63,81,68,70,76,68,65,70,64,79,90,82,87,78,97,74,77,97,78,77,116,115,118,107\}\\B = \{61,58,78,71,72,92,66,83,70,83,78,81,74,85,89,98,97,141,126,112\}$

Workout

Putting the values in the data

```
A=c(59,72,73,63,81,68,70,76,68,65,70,64,79,90,82,87,78,97,74,77,97,78,77,116,115,118,107)
B=c(61,58,78,71,72,92,66,83,70,83,78,81,74,85,89,98,97,141,126,112)
print(A)
```

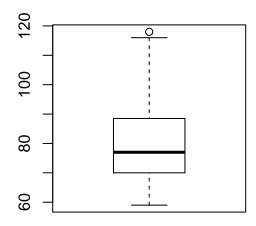
```
## [1] 59 72 73 63 81 68 70 76 68 65 70 64 79 90 82 87 78 97 74 ## [20] 77 97 78 77 116 115 118 107
```

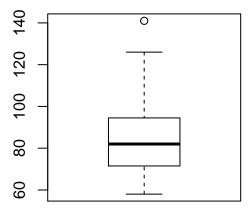
```
print(B)
```

```
## [1] 61 58 78 71 72 92 66 83 70 83 78 81 74 85 89 98 97 141 126 ## [20] 112
```

Plotting boxplot

```
par(mfrow=c(1,2)) #To plot the boxplot in same plot
boxplot(A)
boxplot(B)
```





and for double sided stem we will use

```
stem<-unique(min(A%/%10,B%/%10):max(A%/%10,B%/%10))
for(i in sort(stem))
{
cat((sort(((A[(A%/%10)==i]/10)-i)*10,decreasing=T)),"|",i,"|",sort(((B[(B%/%10)==i]/10)-i)*10) , "\n")
}

## 9 | 5 | 8
## 8 8 5 4 3 | 6 | 1 6
## 9 8 8 7 7 6 4 3 2 0 0 | 7 | 0 1 2 4 8 8
## 7 2 1 | 8 | 1 3 3 5 9
## 7 7 0 | 9 | 2 7 8
## 7 7 10 |
## 8 6 5 | 11 | 2
## | 12 | 6
## | 13 |
## | 14 | 1</pre>
```