Experiment - 10

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Subject Name: Data mining lab	

1.Aim: Outlier detection using R programming

2. CODE:

```
data <- rnorm(500)

#add 10 random outliers to this data
data[1:10] <- c(46,9,15,-90,
        42,50,-82,74,61,-32)

# output to be present as PNG file
png(file="Boxplot.png")
# analyze the outliner in the provided data using the boxplot
boxplot(data)

# remove the outlier of the provided data boxplot.stats() function in R
data <- data[!data %in% boxplot.stats(data)$out]

png(file="Boxplot1.png")
# verify if the outliner has been removed by plotting the boxplot
boxplot(data)

# saving the file
dev.off()
```

OUTPUT:

```
> data <- rnorm(500)
> data[1:10] <- c(46,9,15,-90,
+                  42,50,-82,74,61,-32)
> png(file="Boxplot.png")
> boxplot(data)
> data <- data[!data %in% boxplot.stats(data)$out]
> png(file="Boxplot1.png")
> boxplot(data)
> dev.off()
png
  2
>
```