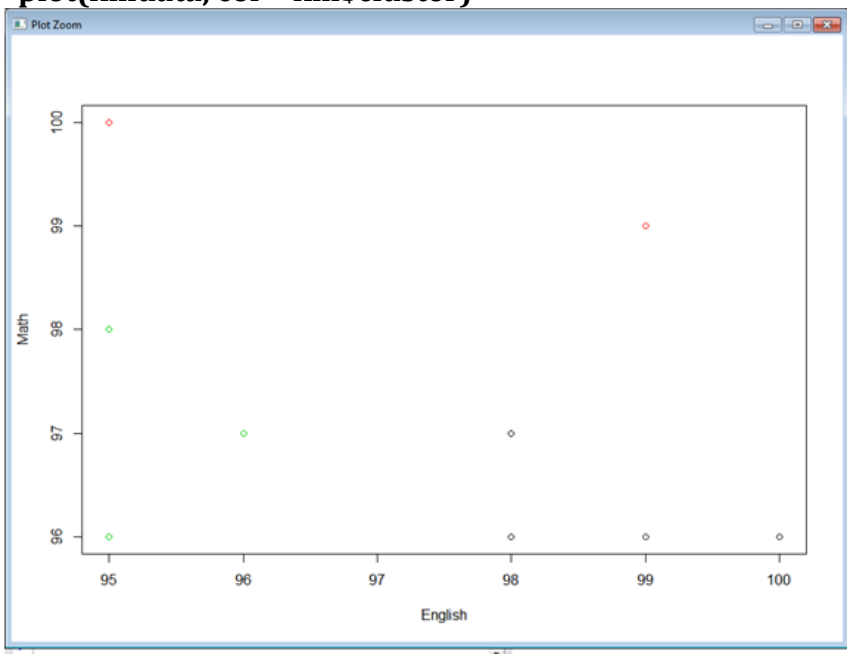
```
> library(plyr)
> library(ggplot2)
> library(cluster)
> library(lattice)
> library(graphics)
> library(grid)
> library(gridExtra)
> grade_input =
as.data.frame(read.csv("C:/Users/Home/Desktop/studentmark.csv"))
> kmdata_orig = as.matrix(grade_input[,c("student","English","Math","Science")])
> kmdata <- kmdata_orig[,2:4]
> kmdata
     English Math Science
 [1,]      99   96      97
 [2,]      99   96      97
 [3,]      98   97      97
 [4,]      95  100      95
 [5,]      95   96      96
 [6,]      96   97      96
 [7,]     100   96      97
 [8,]      95   98      98
 [9,]      98   96      96
[10,]      99   99      95
> km <- kmeans(kmdata, 3, 15)
> print(km)
K-means clustering with 3 clusters of sizes 5, 2, 3

Cluster means:
   English Math  Science
1 98.80000 96.2 96.80000
2 97.00000 99.5 95.00000
3 95.33333 97.0 96.66667

Clustering vector:
 [1] 1 1 1 2 3 3 1 3 1 2

Within cluster sum of squares by cluster:
[1] 4.400000 8.500000 5.333333
 (between_SS / total_SS =  70.4 %)

Available components:

[1] "cluster"      "centers"      "totss"        "withinss"
[5] "tot.withinss" "betweenss"    "size"         "iter"
[9] "ifault
```

>plot(kmdata, col = km$cluster)



points(km$centers, col = 1:2, pch =10)