

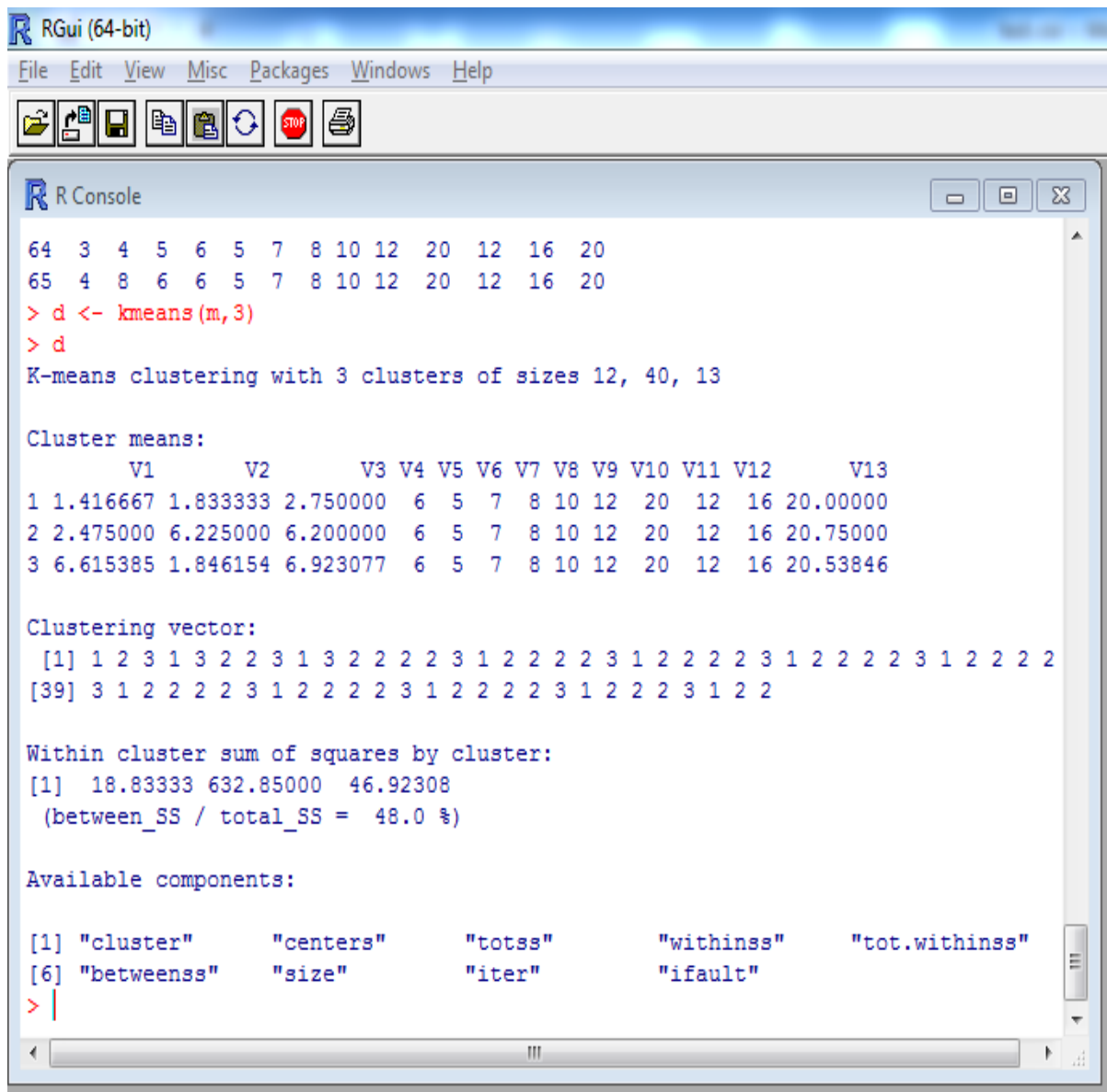
CS5542 Big Data Apps and Analytics

LAB ASSIGNMENT #2

1) R Project

Prepare a dataset and perform k-means clustering.

Applying K means algorithm for a dataset Using R programming . Given below is the screen shot



The screenshot shows the RGui (64-bit) interface. The R Console window displays the following output:

```
64 3 4 5 6 5 7 8 10 12 20 12 16 20
65 4 8 6 6 5 7 8 10 12 20 12 16 20
> d <- kmeans(m,3)
> d
K-means clustering with 3 clusters of sizes 12, 40, 13

Cluster means:
      V1      V2      V3 V4 V5 V6 V7 V8 V9 V10 V11 V12      V13
1 1.416667 1.833333 2.750000 6 5 7 8 10 12 20 12 16 20.00000
2 2.475000 6.225000 6.200000 6 5 7 8 10 12 20 12 16 20.75000
3 6.615385 1.846154 6.923077 6 5 7 8 10 12 20 12 16 20.53846

Clustering vector:
[1] 1 2 3 1 3 2 2 3 1 3 2 2 2 3 1 2 2 2 2 3 1 2 2 2 2 3 1 2 2 2 2 3 1 2 2 2 2
[39] 3 1 2 2 2 2 3 1 2 2 2 2 3 1 2 2 2 2 3 1 2 2 2 3 1 2 2

Within cluster sum of squares by cluster:
[1] 18.83333 632.85000 46.92308
(between_SS / total_SS = 48.0 %)
```

Available components:

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

The console ends with a prompt character `>` and a vertical bar.

2) Create a RoboMe and Watch App that using any API

Here I am using a Google Maps API. Below is the Screen Shot

