



1. Find the mean, median and mode of the data through R tool?



```
RStudio (64-bit) - [R Console]
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> getmode<-function(v) {
+   uniqv<-unique(v)
+   uniqv[which.max(tabulate(match(v,uniqv)))]}
> v<-c(7,5,5,4,4,4,8,9,2,2,2,4,3)
> r3<-getmode(v)
> print(r3)
[1] 4
> a<-c(7,6,8,4,5,9,7,3,6,7)
> r1<-mean(a)
> r2<-median(a)
> print(r1)
[1] 6.2
> print(r2)
[1] 6.5
> |
```

2. Find the Interquartile range, range and the five summary number using R tool?

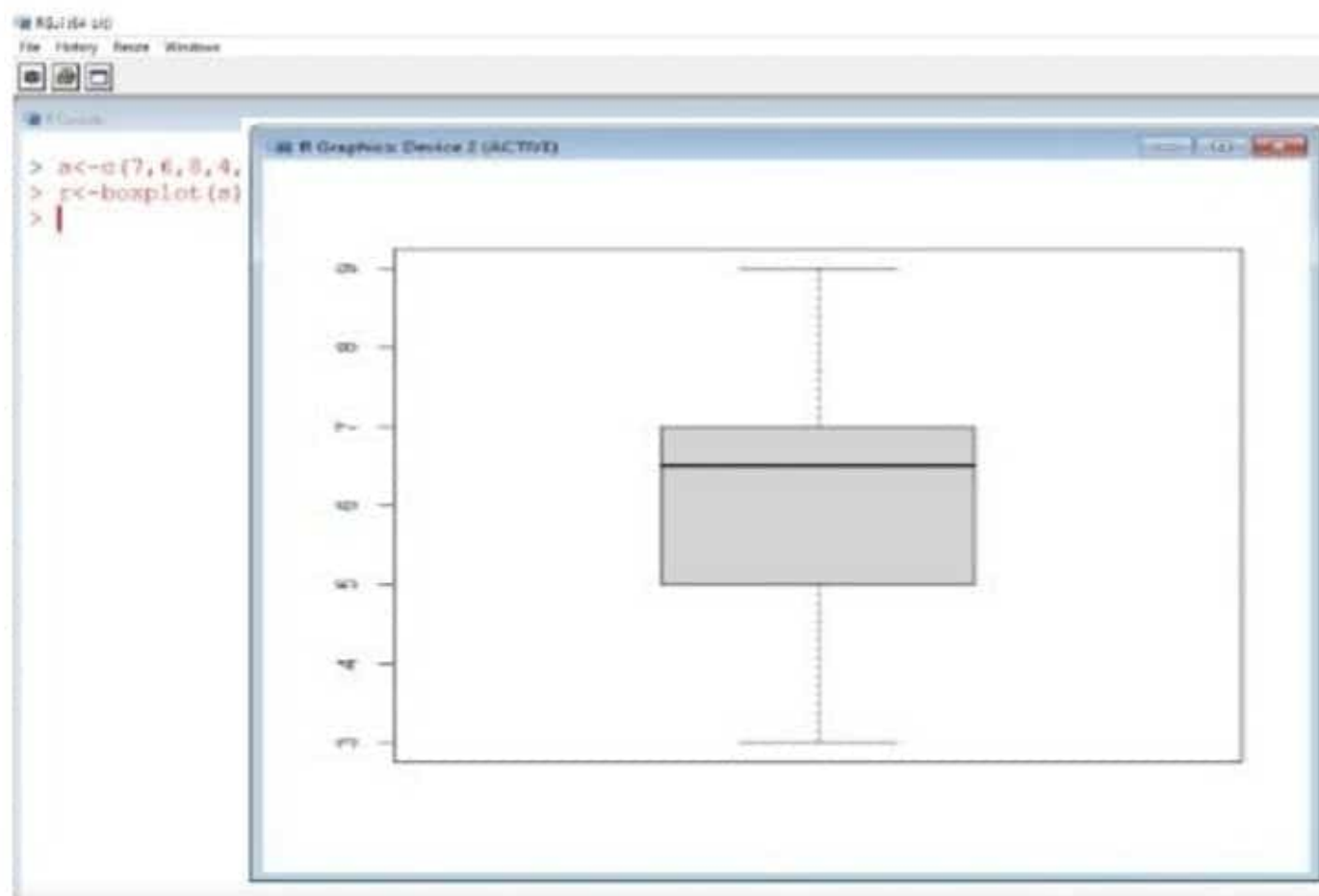


```
RStudio - (R Console)
File Edit View Misc Packages Windows Help
> a<-c(3,4,5,5,5,6,7,8,9,9,10)
> r1<-IQR(a)
> print(r1)
[1] 3.5
> r2<-range(a)
> print(r2)
[1] 3 10
> r3<-fivenum(a)
> print(r3)
[1] 3.0 5.0 6.0 8.5 10.0
> |
```

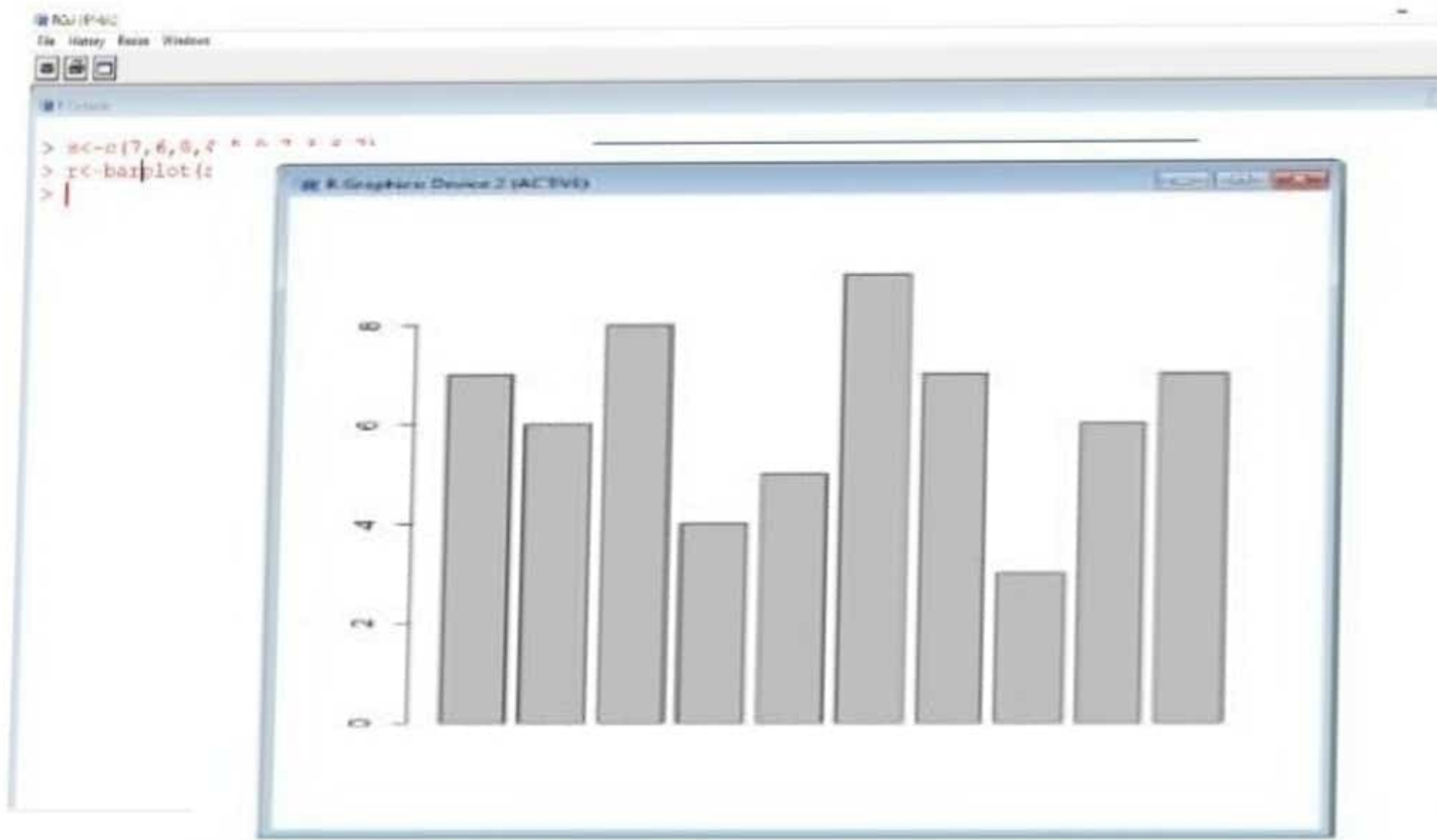
The screenshot shows an RStudio console window with the following R code and output:

- `a<-c(3,4,5,5,5,6,7,8,9,9,10)`: Creates a vector `a` with values 3, 4, 5, 5, 5, 6, 7, 8, 9, 9, 10.
- `r1<-IQR(a)`: Calculates the Interquartile Range (IQR) of `a`.
- `print(r1)`: Prints the IQR, which is 3.5.
- `r2<-range(a)`: Calculates the range of `a`.
- `print(r2)`: Prints the range, which is 3 10.
- `r3<-fivenum(a)`: Calculates the five-number summary of `a`.
- `print(r3)`: Prints the five-number summary, which is 3.0 5.0 6.0 8.5 10.0.

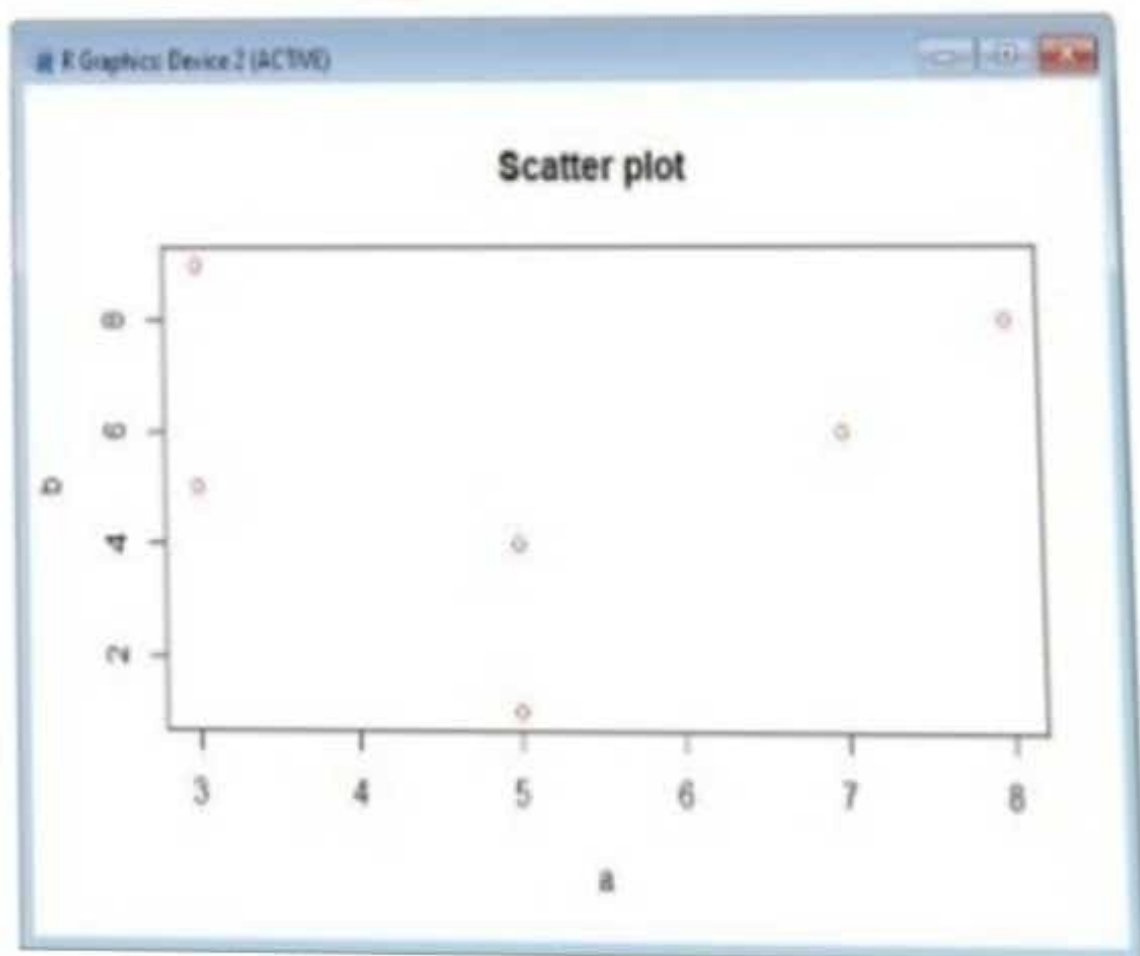
3. Plotting the boxplot graph using R tool?



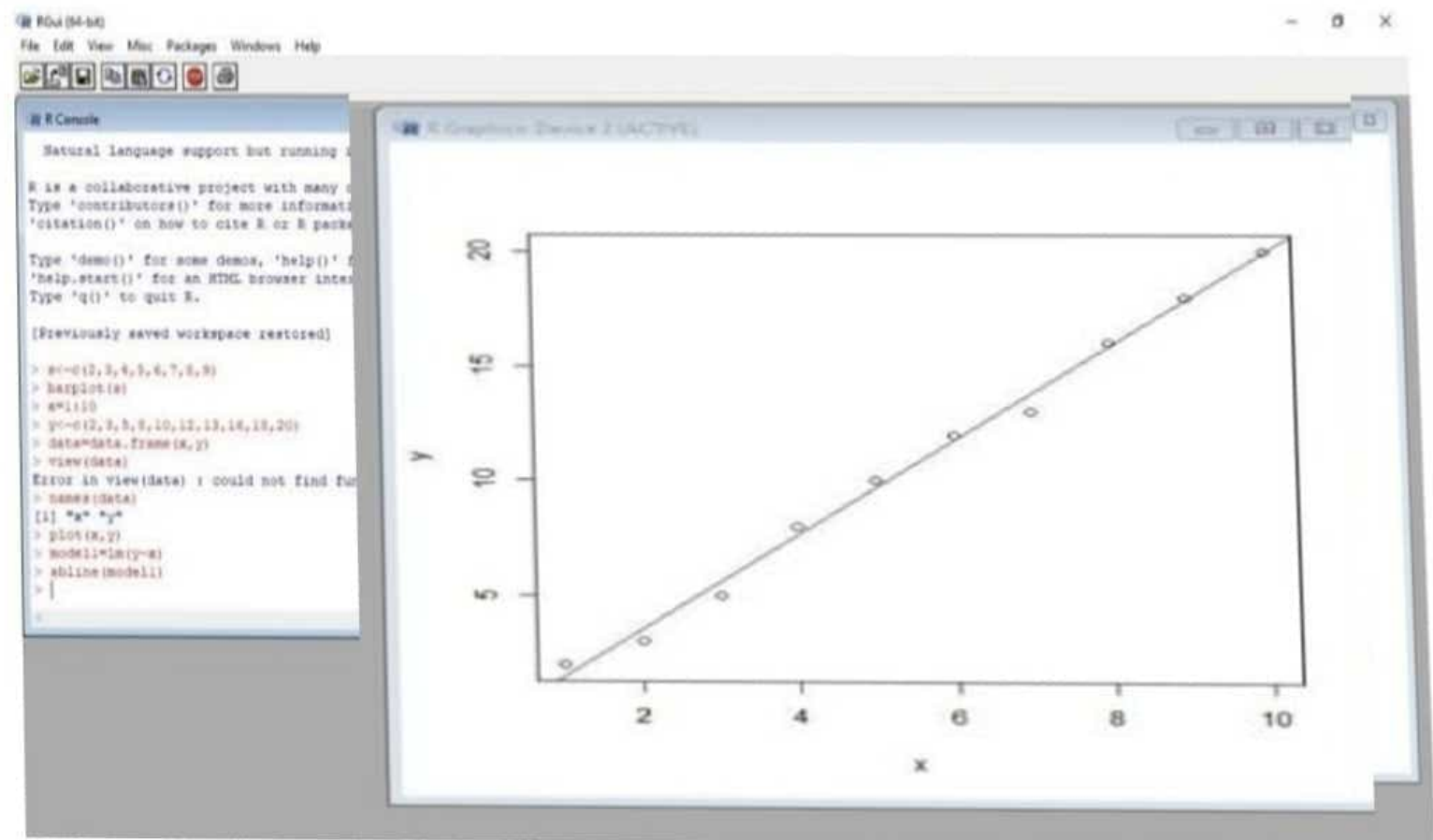
4. Plotting the barplot graph using R tool?



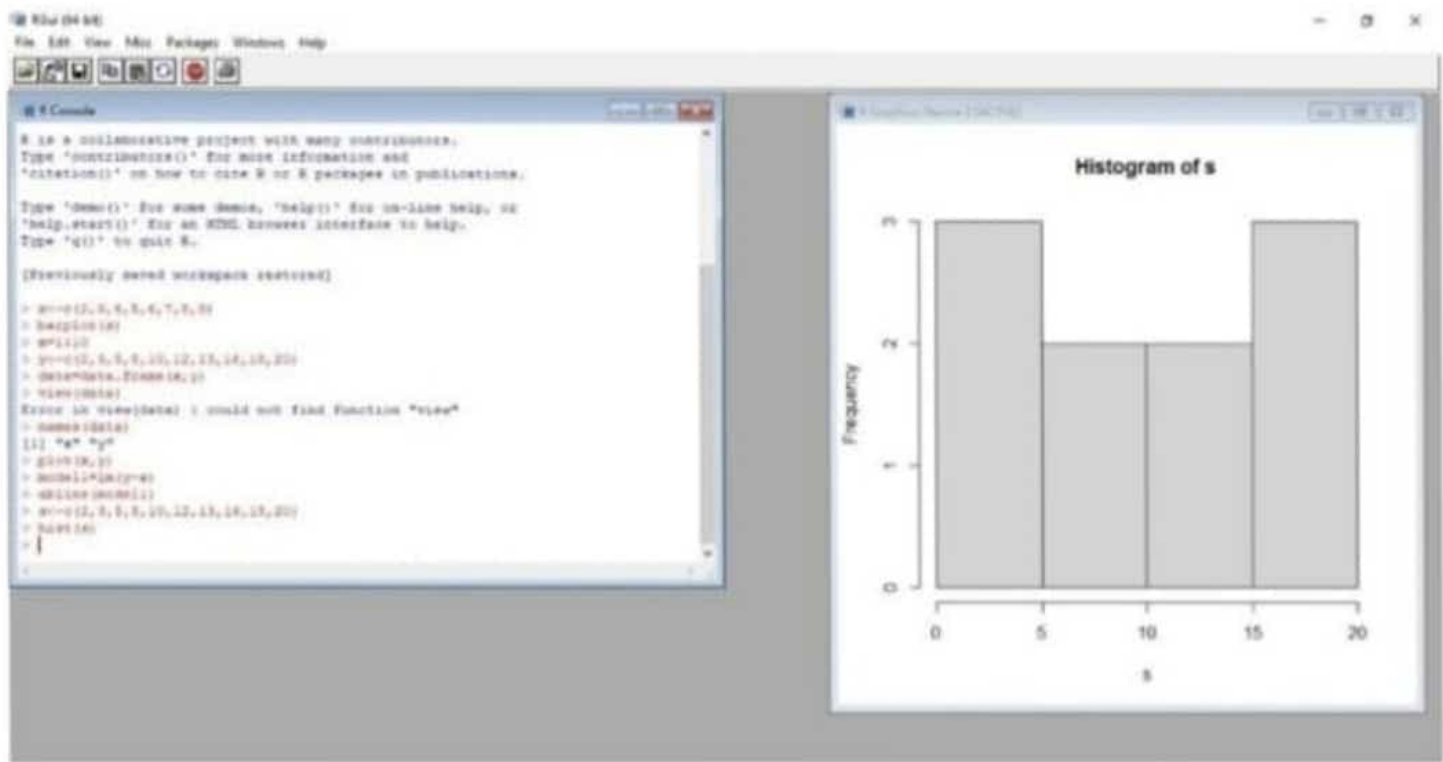
5. Plotting the scatterplot using R tool?



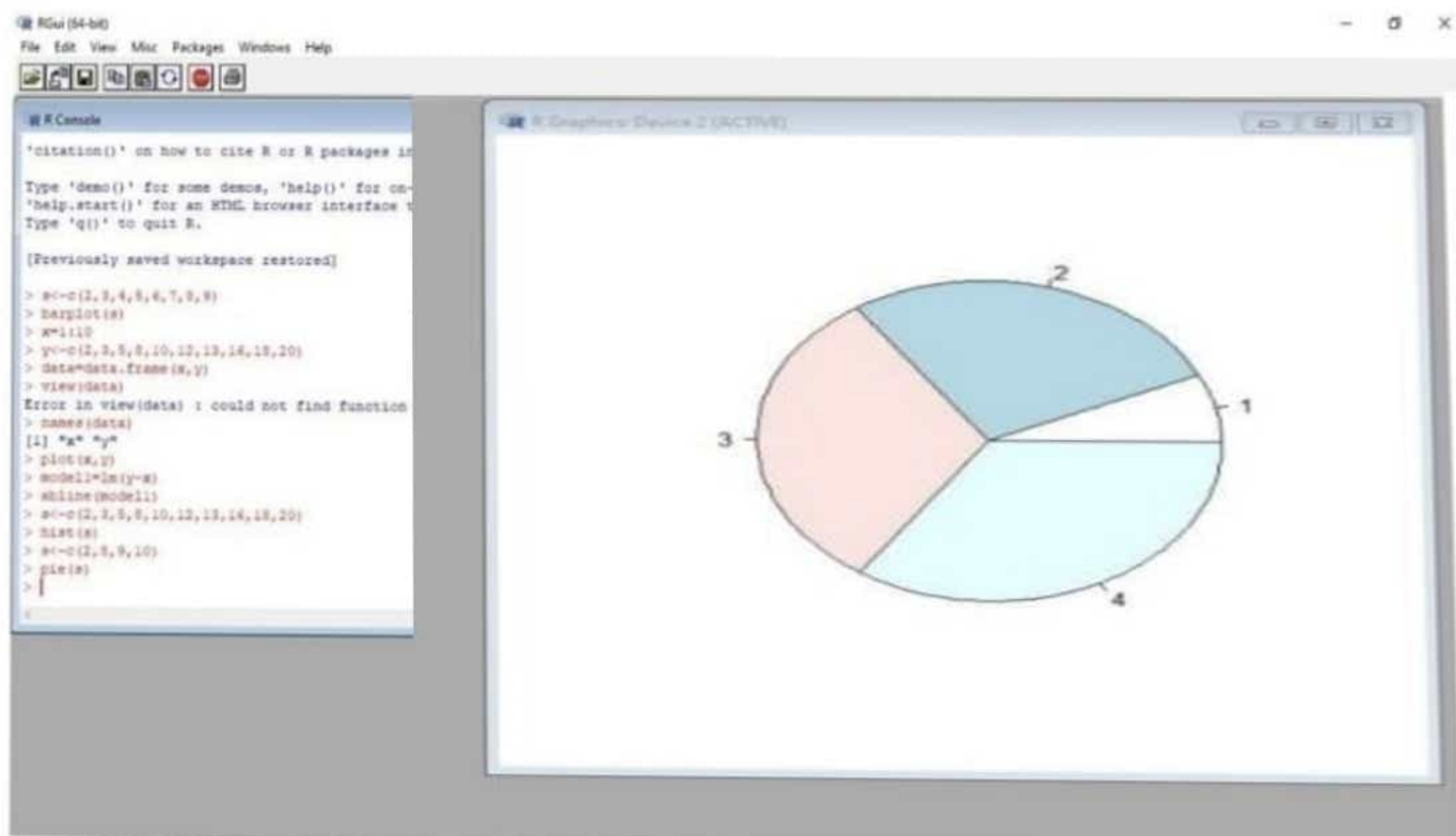
6. Linear regression through R tool?



7. plotting histogram graph through the R tool?



8. using R program create a pie chart for data sample?



9. plotting the line chart graph through the R tool?

