ACADGILD

SESSION 4: FOUNDATIONAL R PROGRAMMING-II

Assignment 3

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1. Introduction

This assignment will help you understand the concepts learnt in the session.

2. Objective

This assignment will test your skills on foundational R Programming- writing functions.

3. Prerequisites

Not applicable.

4. Associated Data Files

Not applicable.

5. Problem Statement

1. states=rownames(USArrests)

    - Get states names with ‘w’.
    - Get states names with ‘W’.

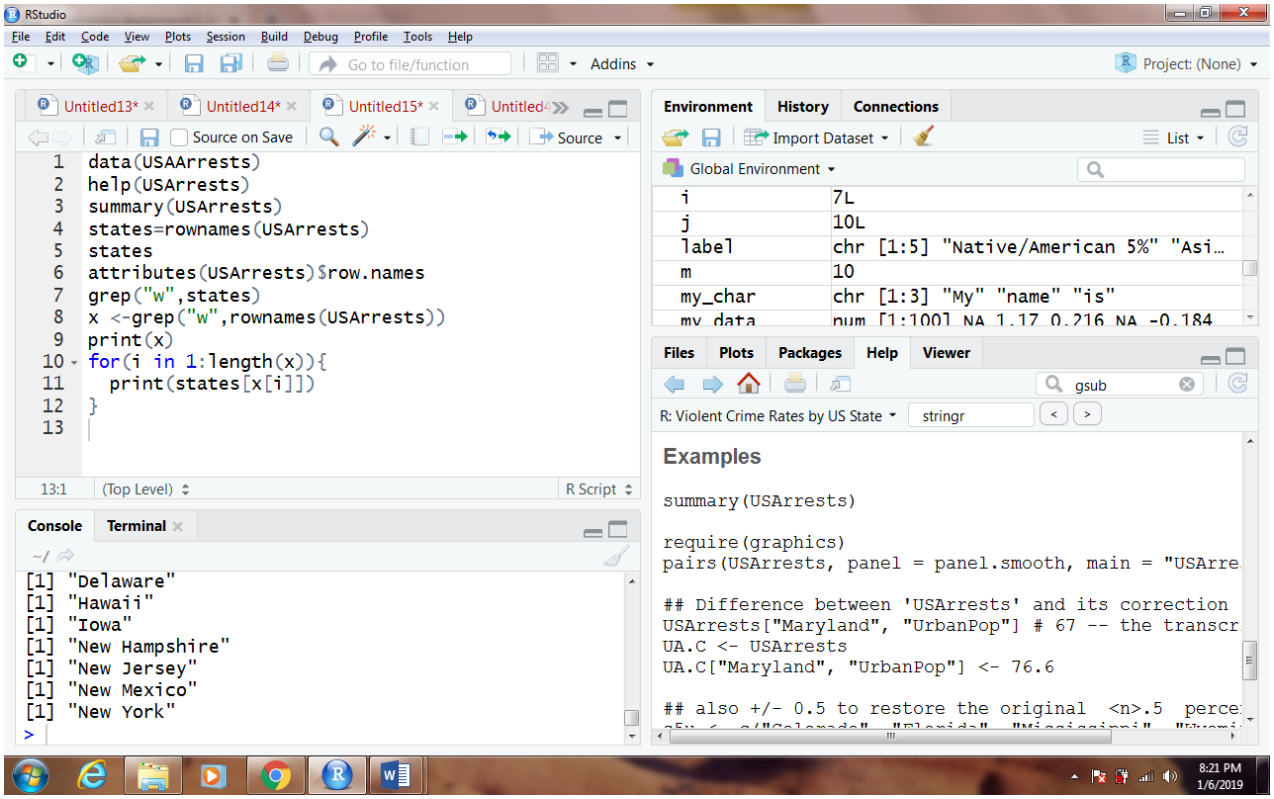
```
#1. States
=
rownames(US
Arrests)
              #Get states names with 'w'.
              #Get states names with 'W'.
```

```
States = rownames(USArrests)
rownames(USArrests)


#for w
grep("w",rownames(USArrests))
x<-grep("w",States)


for (i in 1:length(x)){
  print(States[x[i]])

}
```

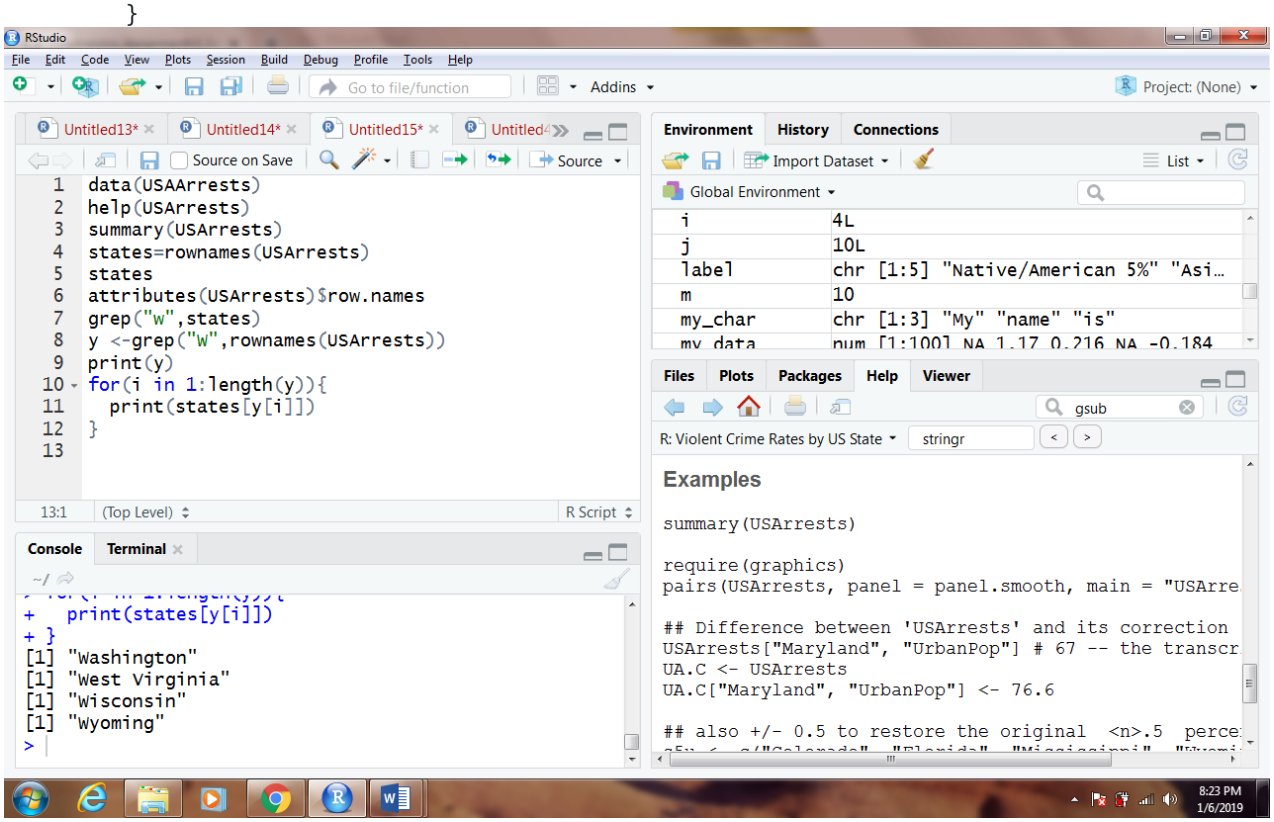


2

```
#for
W
        grep("W",rownames(USArrests))
        x<-grep("w",States)


        for (i in 1:length(x)){
          print(States[x[i]])
          }
```

}



2. Prepare a histogram of the number of characters in each US state.

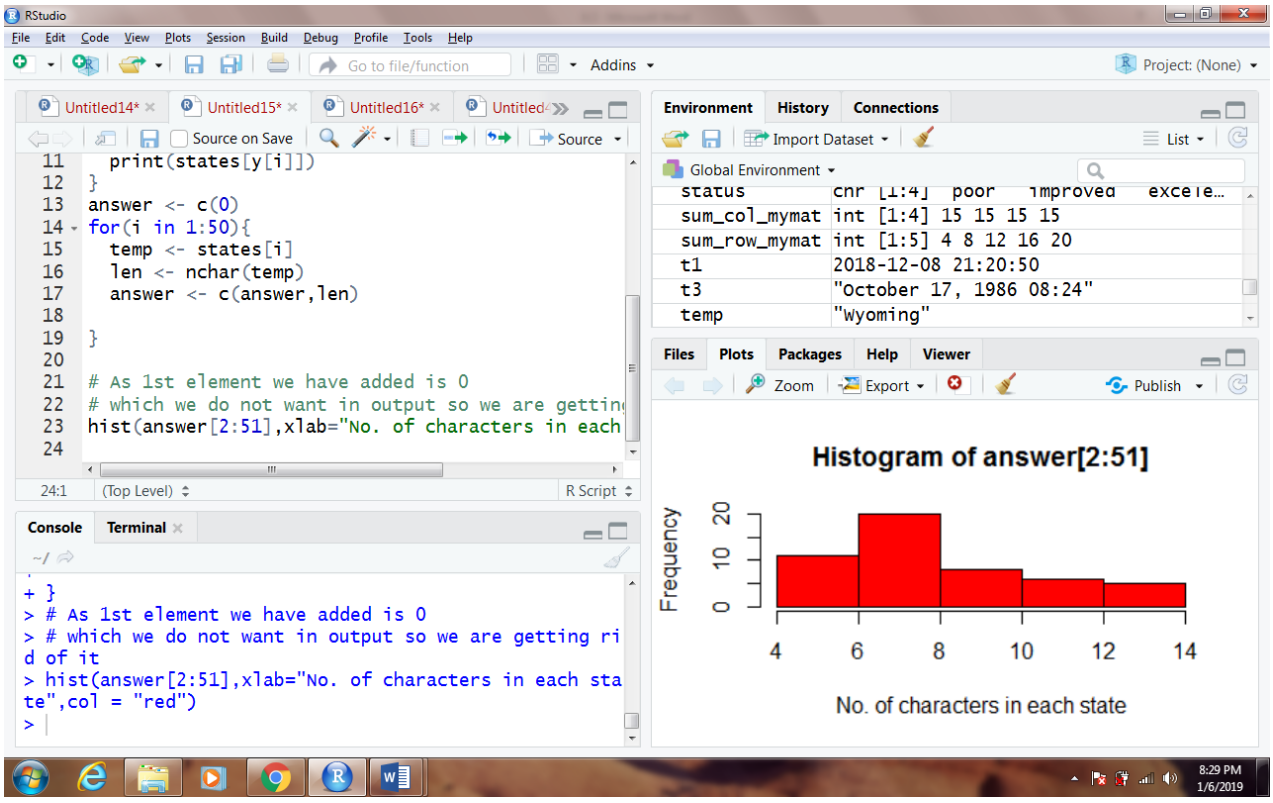
```
answer
<-
c(0)
```

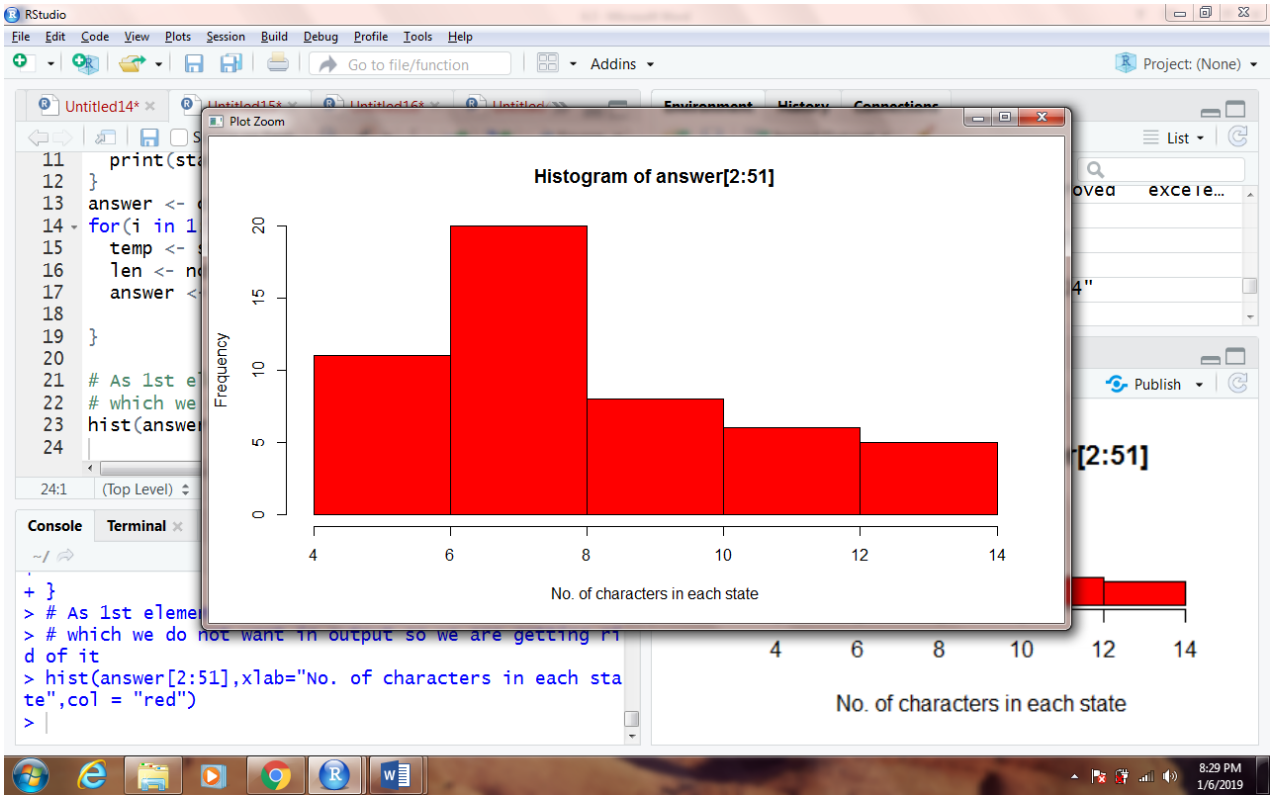
```
for(i in 1:50){
  temp <- States[i]
  len <- nchar(temp)
  answer <- c(answer,len)

}


# As 1st element we have added is 0
# which we do not want in output so we are getting rid of it

hist(answer[2:51],xlab="No. of characters in each state",col = "red")
```




RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Plot Zoom
Histogram of answer[2:51]
Frequency
No. of characters in each state
Console
Terminal
> # As 1st eleme
> # which we do not want in output so we are getting fi
d of it
> hist(answer[2:51],xlab="No. of characters in each sta
te",col = "red")
8:29 PM
1/6/2019

6. Expected Format

1. R file should be submitted where applicable.
2. R file should be in PDF or in .r format
3. Proper screenshots of the outputs should be submitted as well
4. The r codes, if submitted in any other format, will be subjected to deduction in marks

Note: Your solution will not be entertained if it is any other format, e.g., .zip, .doc, .rtf etc.

7. Approximate Time to Complete Task

30 mins.