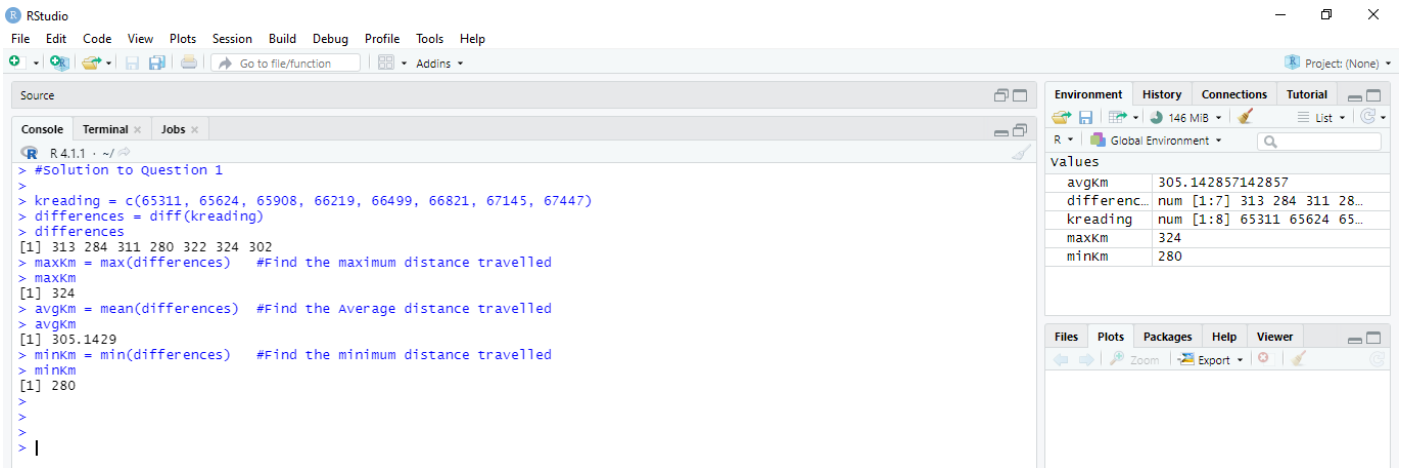
Name: Sucheta Jhunjhunwala

Homework 1

Solution 1

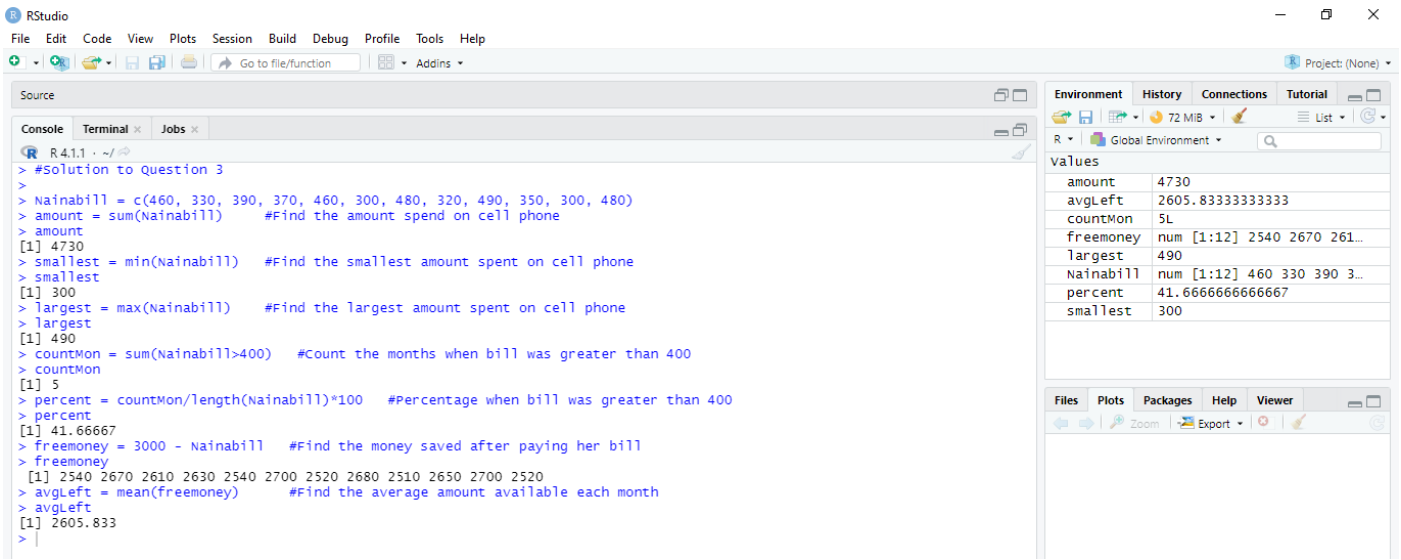


```
> #Solution to Question 1
>
> kreading = c(65311, 65624, 65908, 66219, 66499, 66821, 67145, 67447)
> differences = diff(kreading)
> differences
[1] 313 284 311 280 322 324 302
> maxKm = max(differences)   #Find the maximum distance travelled
> maxKm
[1] 324
> avgKm = mean(differences)  #Find the Average distance travelled
> avgKm
[1] 305.1429
> minKm = min(differences)   #Find the minimum distance travelled
> minKm
[1] 280
>
>
>
```

Solution 2

```
> #Solution to Question 2
>
> scoreMani = c(7, 6, 10, 8, 7, 9, 9, 6, 4, 10, 8, 6, 9, 10)
> maxScore = max(scoreMani)   #Find the maximum score
> maxScore
[1] 10
> avgScore = mean(scoreMani)  #Find the average score
> avgScore
[1] 7.785714
> minScore = min(scoreMani)   #Find the minimum score
> minScore
[1] 4
> wrongScore = which(scoreMani == 4)  #Find the index when score is 4
> scoreMani[wrongScore] = 5           #Replace score 4 with score 5
> NewavgScore = mean(scoreMani)       #Find the new average score after correction
> NewavgScore
[1] 7.857143
> sum( scoreMani >= 9)
[1] 6
> #The above line counts the number of times Mani's scores were greater than or equal to 9
> scoreLess = sum(scoreMani < 17)   #To find the count of the scores less than 17
> scoreLess
[1] 14
> total = length(scoreMani)     #Find the total number of scores
> percent = scoreLess/total*100   #Find the percentage of scores less than 17
> percent
[1] 100
>
```

Solution 3



```
> #Solution to Question 3
>
> Nainabill = c(460, 330, 390, 370, 460, 300, 480, 320, 490, 350, 300, 480)
> amount = sum(Nainabill)     #Find the amount spend on cell phone
> amount
[1] 4730
> smallest = min(Nainabill)   #Find the smallest amount spent on cell phone
> smallest
[1] 300
> largest = max(Nainabill)    #Find the largest amount spent on cell phone
> largest
[1] 490
> countMon = sum(Nainabill>400)   #Count the months when bill was greater than 400
> countMon
[1] 5
> percent = countMon/length(Nainabill)*100   #Percentage when bill was greater than 400
> percent
[1] 41.66667
> freemoney = 3000 - Nainabill   #Find the money saved after paying her bill
> freemoney
 [1] 2540 2670 2610 2630 2540 2700 2520 2680 2510 2650 2700 2520
> avgLeft = mean(freemoney)      #Find the average amount available each month
> avgLeft
[1] 2605.833
>
```