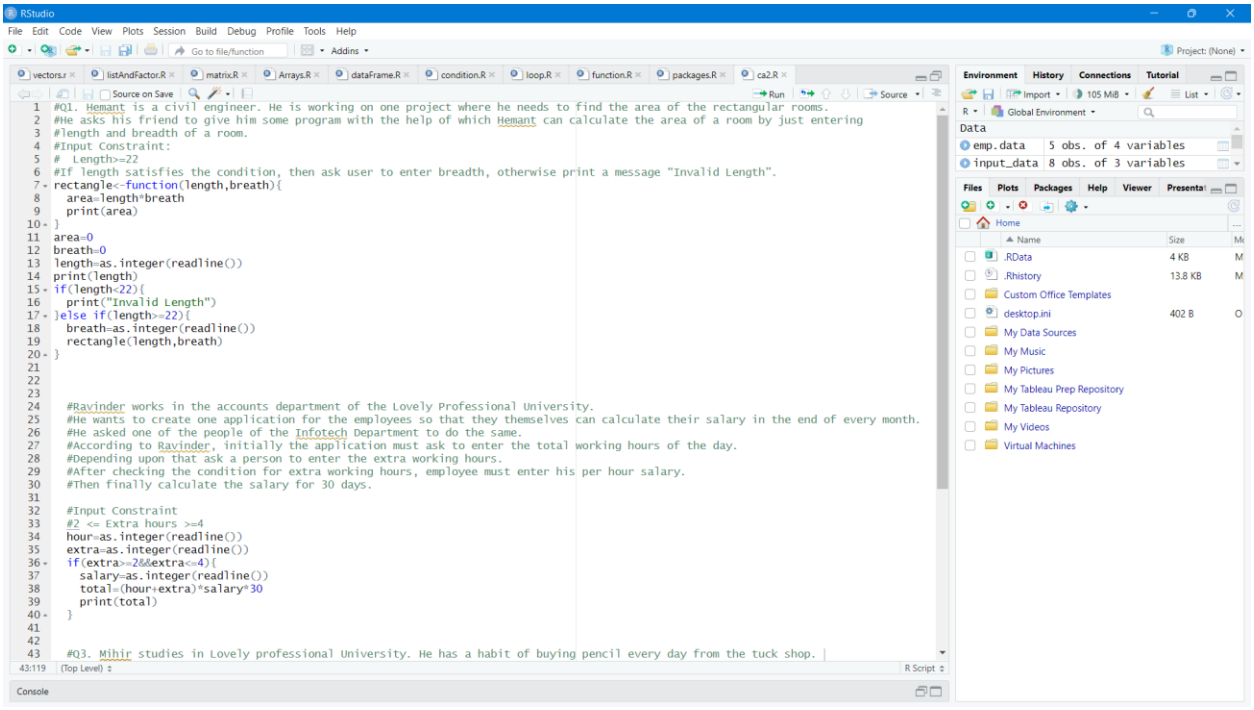
Shivam verma
12017149
RK20DPA28

Q1



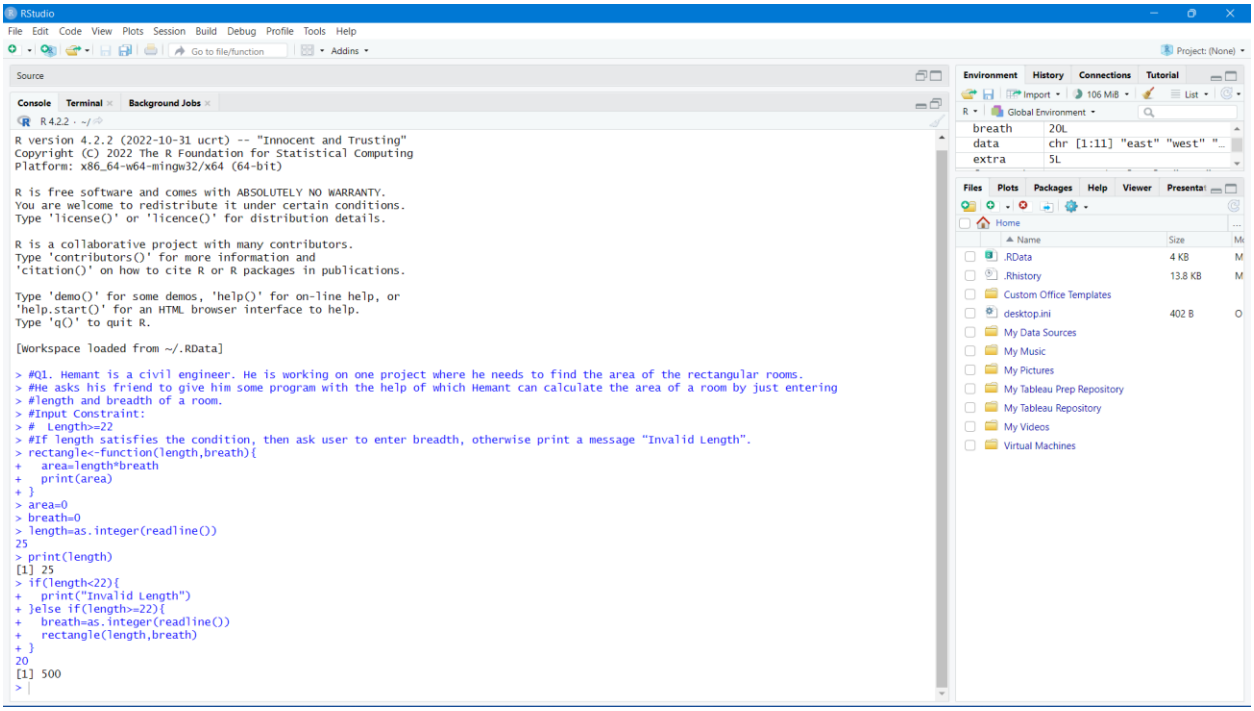
```
#Q1. Hemant is a civil engineer. He is working on one project where he needs to find the area of the rectangular rooms.
#He asks his friend to give him some program with the help of which Hemant can calculate the area of a room by just entering
#length and breadth of a room.
#Input Constraint:
#  Length>=22
#If length satisfies the condition, then ask user to enter breadth, otherwise print a message "Invalid Length".
rectangle<-function(length,breath){
  area=length*breath
  print(area)
}
area=0
breath=0
length=as.integer(readline())
print(length)
if(length<22){
  print("Invalid Length")
}else if(length>=22){
  breath=as.integer(readline())
  rectangle(length,breath)
}



  #Ravinder works in the accounts department of the Lovely Professional University.
  #He wants to create one application for the employees so that they themselves can calculate their salary in the end of every month.
  #He asked one of the people of the Infotech Department to do the same.
  #According to Ravinder, initially the application must ask to enter the total working hours of the day.
  #Depending upon that ask a person to enter the extra working hours.
  #After checking the condition for extra working hours, employee must enter his per hour salary.
  #Then finally calculate the salary for 30 days.

  #Input Constraint
  #2 <= Extra hours >=4
  hour=as.integer(readline())
  extra=as.integer(readline())
  if(extra>=2&&extra<=4){
    salary=as.integer(readline())
    total=(hour+extra)*salary*30
    print(total)
  }


  #Q3. Mihir studies in Lovely professional University. He has a habit of buying pencil every day from the tuck shop.
```



```
R version 4.2.2 (2022-10-31 ucrt) -- "Innocent and Trusting"
Copyright (C) 2022 The R Foundation for Statistical Computing
Platform: x86_64-w64-mingw32/x64 (64-bit)

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Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[Workspace loaded from ~/.RData]

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> #If length satisfies the condition, then ask user to enter breadth, otherwise print a message "Invalid Length".
> rectangle<-function(length,breath){
+   area=length*breath
+   print(area)
+ }
> area=0
> breath=0
> length=as.integer(readline())
25
> print(length)
[1] 25
> if(length<22){
+   print("Invalid Length")
+ }else if(length>=22){
+   breath=as.integer(readline())
+   rectangle(length,breath)
+ }
20
[1] 500
>
```
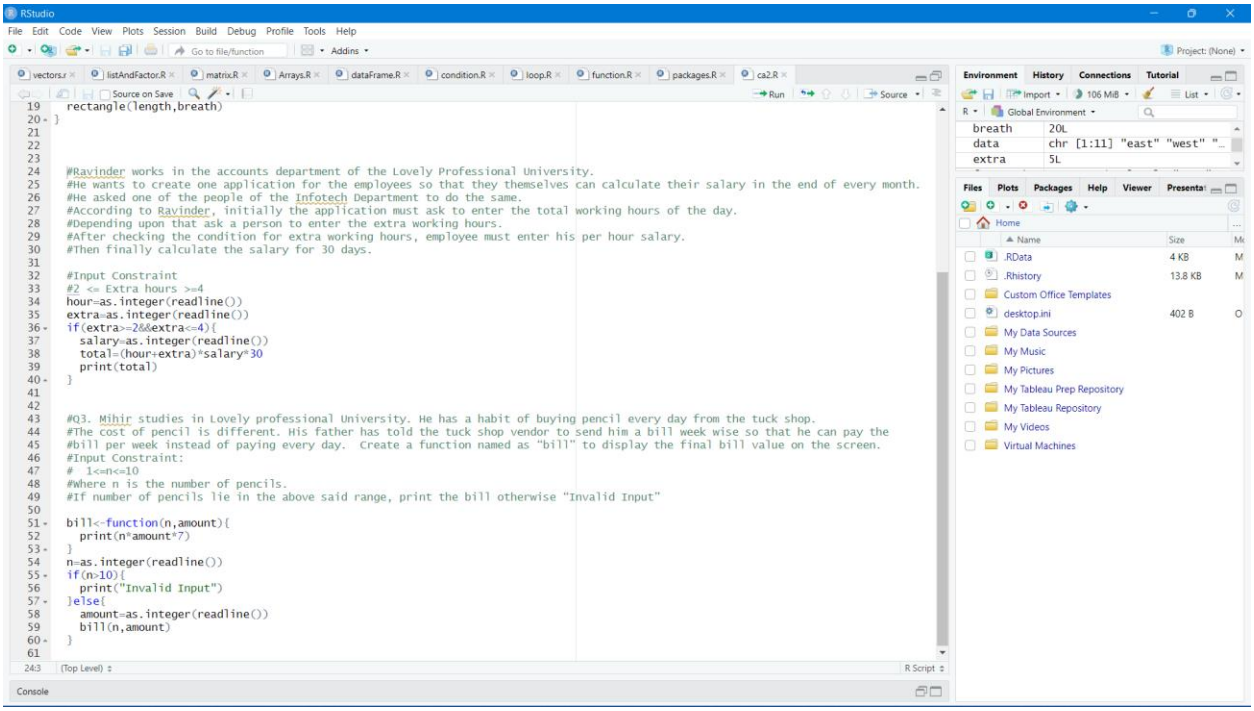

Q2


RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
vectors.r listAndFactor.R matrix.R Arrays.R dataFrame.R condition.R loop.R function.R packages.R ca2.R
Source on Save Run Source
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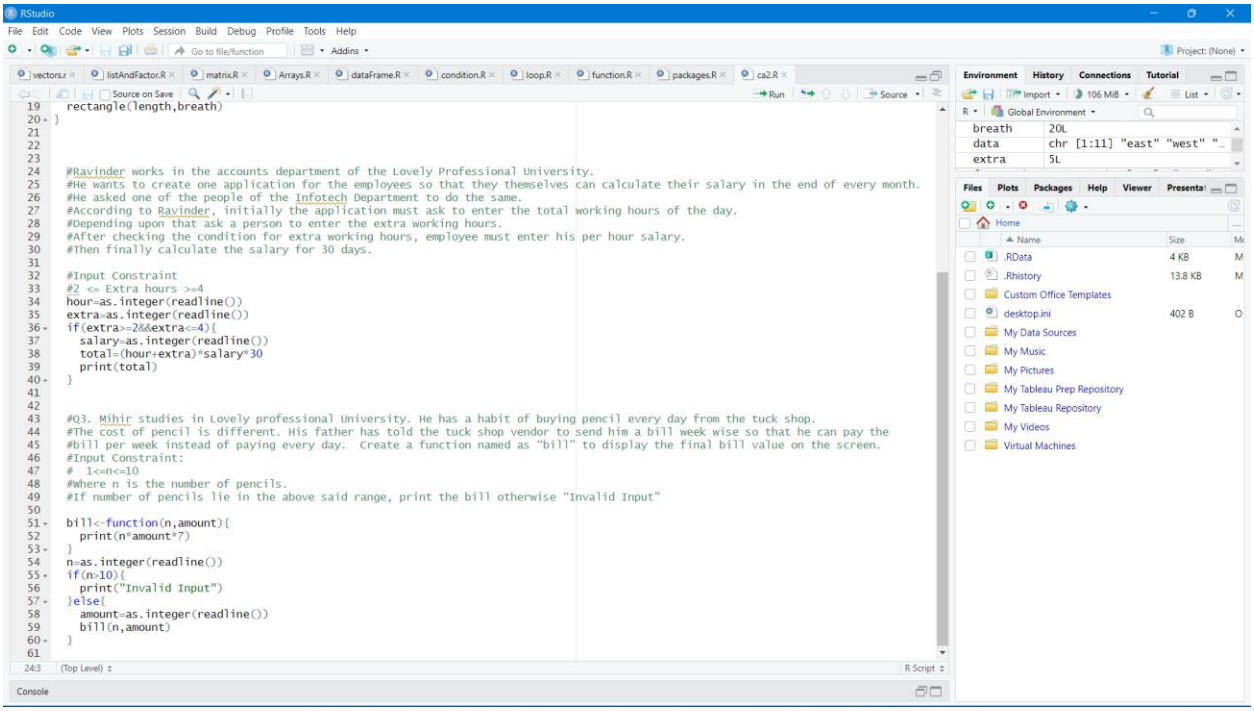
#Q3. Mihir studies in Lovely professional University. He has a habit of buying pencil every day from the tuck shop.
#The cost of pencil is different. His father has told the tuck shop vendor to send him a bill week wise so that he can pay the
#bill per week instead of paying every day. Create a function named as "bill" to display the final bill value on the screen.
#Input Constraint:
1<=n<=10
#Where n is the number of pencils.
#If number of pencils lie in the above said range, print the bill otherwise "Invalid Input"
bill<-function(n,amount){
print(n*amount*7)
}
n=as.integer(readline())
if(n>10){
print("Invalid Input")
}else{
amount=as.integer(readline())
bill(n,amount)
}
24:3 (Top Level) R Script
Console
Environment History Connections Tutorial
Import 106 MiB List
Global Environment
breath 20L
data chr [1:11] "east" "west" "...
extra 5L
Files Plots Packages Help Viewer Presenta
Home
Name Size
.RData 4 KB
.Rhistory 13.8 KB
Custom Office Templates
desktop.ini 402 B
My Data Sources
My Music
My Pictures
My Tableau Prep Repository
My Tableau Repository
My Videos
Virtual Machines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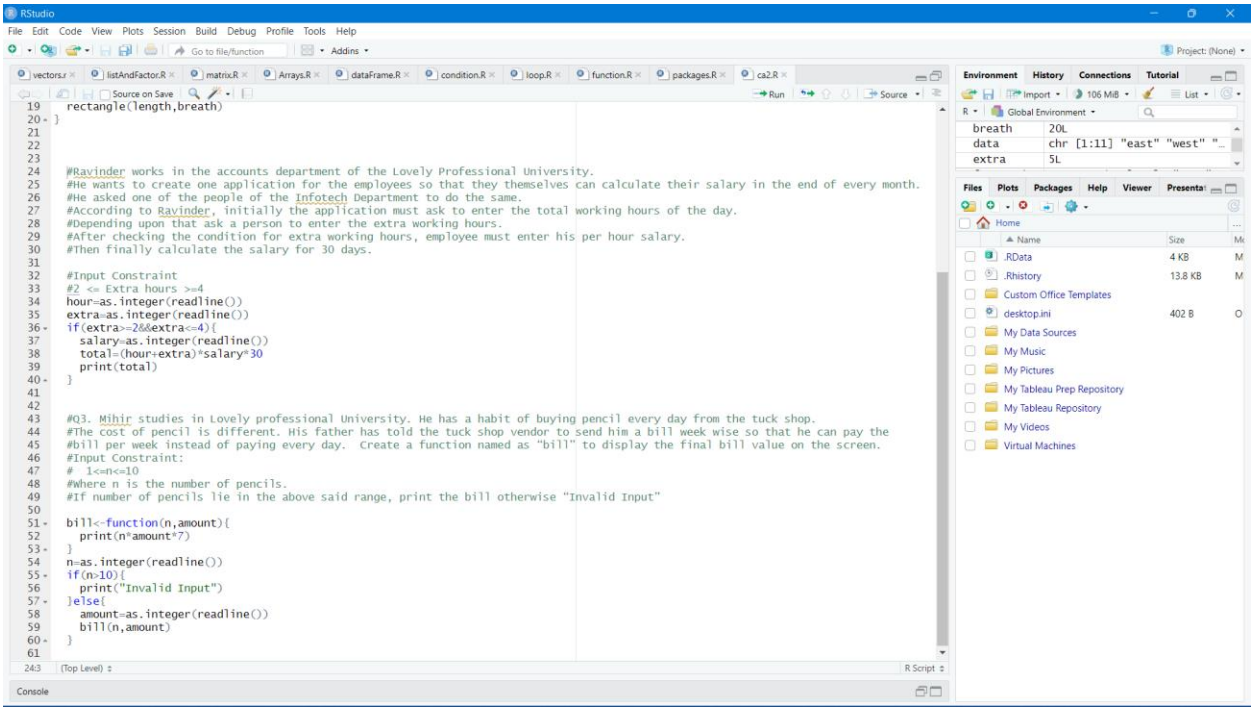
Home
Name Size
.RData 4 KB
.Rhistory 13.8 KB
Custom Office Templates
desktop.ini 402 B
My Data Sources
My Music
My Pictures
My Tableau Prep Repository
My Tableau Repository
My Videos
Virtual Machines

Q3



```
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}



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```

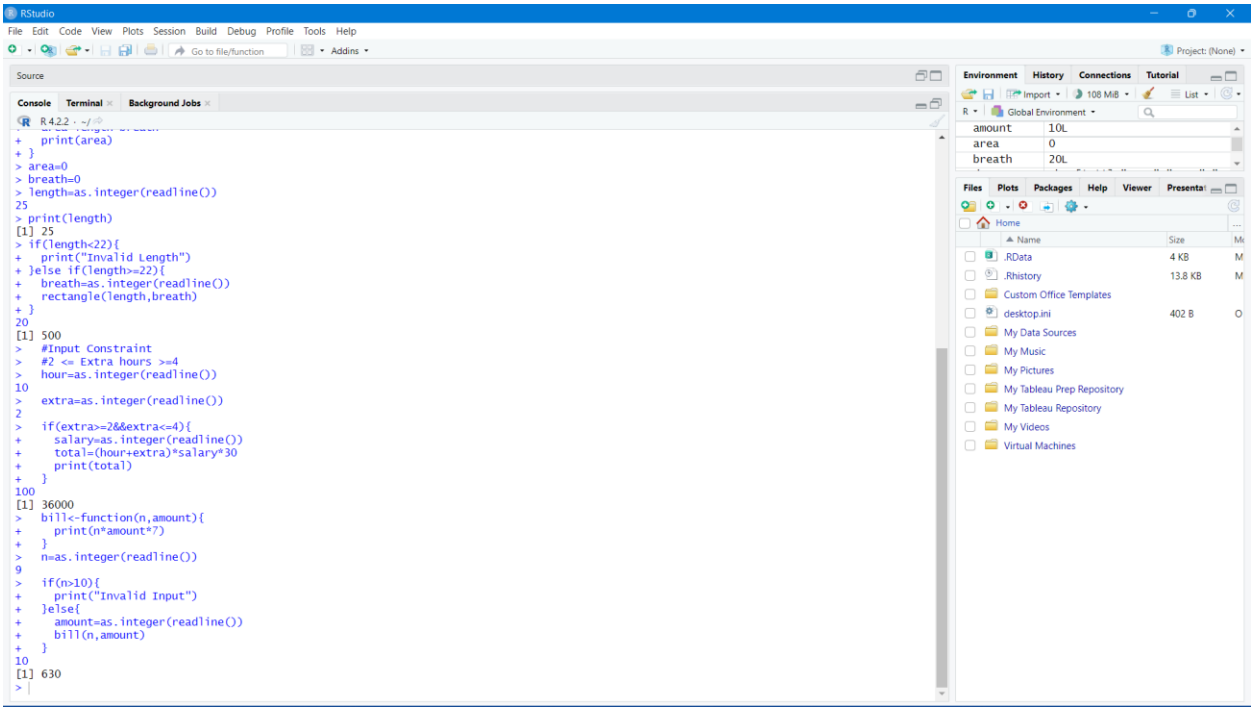

```
+   print(area)
+ }
> area=0
> breath=0
> length=as.integer(readline())
25
> print(length)
[1] 25
> if(length<22){
+   print("Invalid Length")
+ }else if(length>=22){
+   breath=as.integer(readline())
+   rectangle(length,breath)
+ }
20
[1] 500
>   #Input Constraint
>   #2 <= Extra hours >=4
>   hour=as.integer(readline())
10
>   extra=as.integer(readline())
2
>   if(extra>=2&&extra<=4){
+     salary=as.integer(readline())
+     total=(hour+extra)*salary*30
+     print(total)
+   }
100
[1] 36000
>   bill<-function(n,amount){
+     print(n*amount*7)
+   }
>   n=as.integer(readline())
9
>   if(n>10){
+     print("Invalid Input")
+   }else{
+     amount=as.integer(readline())
+     bill(n,amount)
+   }
10
[1] 630
>
```