Computation of Tables and Graphs in RStudio

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Aim-To Create Tables and Graphs

Code-

```
empid=c(1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
empid
age=c(30,37,45,32,50,60,35,32,34,43,32,30,43,50,60)
age
sex=c(0,1,0,1,1,1,0,0,1,0,0,1,1,0,0)
sex
status=c(1,1,2,2,1,1,1,2,2,1,2,1,2,1,2)
empinfo=data.frame(empid,age,sex,status)
empinfo
empinfo$sex=factor(empinfo$status,labels =
c("male","female"))
empinfo$sex=factor(empinfo$status,labels =
c("staff","faculty"))
empinfo
gender_male=subset(empinfo,empinfo$sex=='male')
gender_male
gender_female=subset(empinfo,empinfo$sex=='female')
gender_female
status_staff=subset(empinfo,empinfo$status=='staff')
status_staff
status_faculty=subset(empinfo,empinfo$status=='facul
ty')
status_faculty
summary(empinfo)
summary(empinfo$age)
summary(empinfo$gender)
summary(gender_male)
summary(gender_female)
summary(status_staff)
summary(status_faculty)
```

```
table1=table(empinfo$sex)
table1
table2=table(empinfo$status)
table2
table3=table(empinfo$gender)
table3
plot(empinfo$age,type="l",main = "age of
subjects",xlab = "empid",ylab="age in
year",col="blue")
?plot
help(plot)
```

Output-

```
> empid=c(1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
> empid
 [1]  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15
>
age=c(30,37,45,32,50,60,35,32,34,43,32,30,43,50,60)
> age
 [1] 30 37 45 32 50 60 35 32 34 43 32 30 43 50 60
> sex=c(0,1,0,1,1,1,0,0,1,0,0,1,1,0,0)
> sex
 [1] 0 1 0 1 1 1 0 0 1 0 0 1 1 0 0
> status=c(1,1,2,2,1,1,1,2,2,1,2,1,2,1,2)
> empinfo=data.frame(empid,age,sex,status)
> empinfo
   empid age sex status
1      1  30   0      1
2      2  37   1      1
3      3  45   0      2
4      4  32   1      2
5      5  50   1      1
6      6  60   1      1
7      7  35   0      1
8      8  32   0      2
9      9  34   1      2
10    10  43   0      1
11    11  32   0      2
12    12  30   1      1
13    13  43   1      2
```

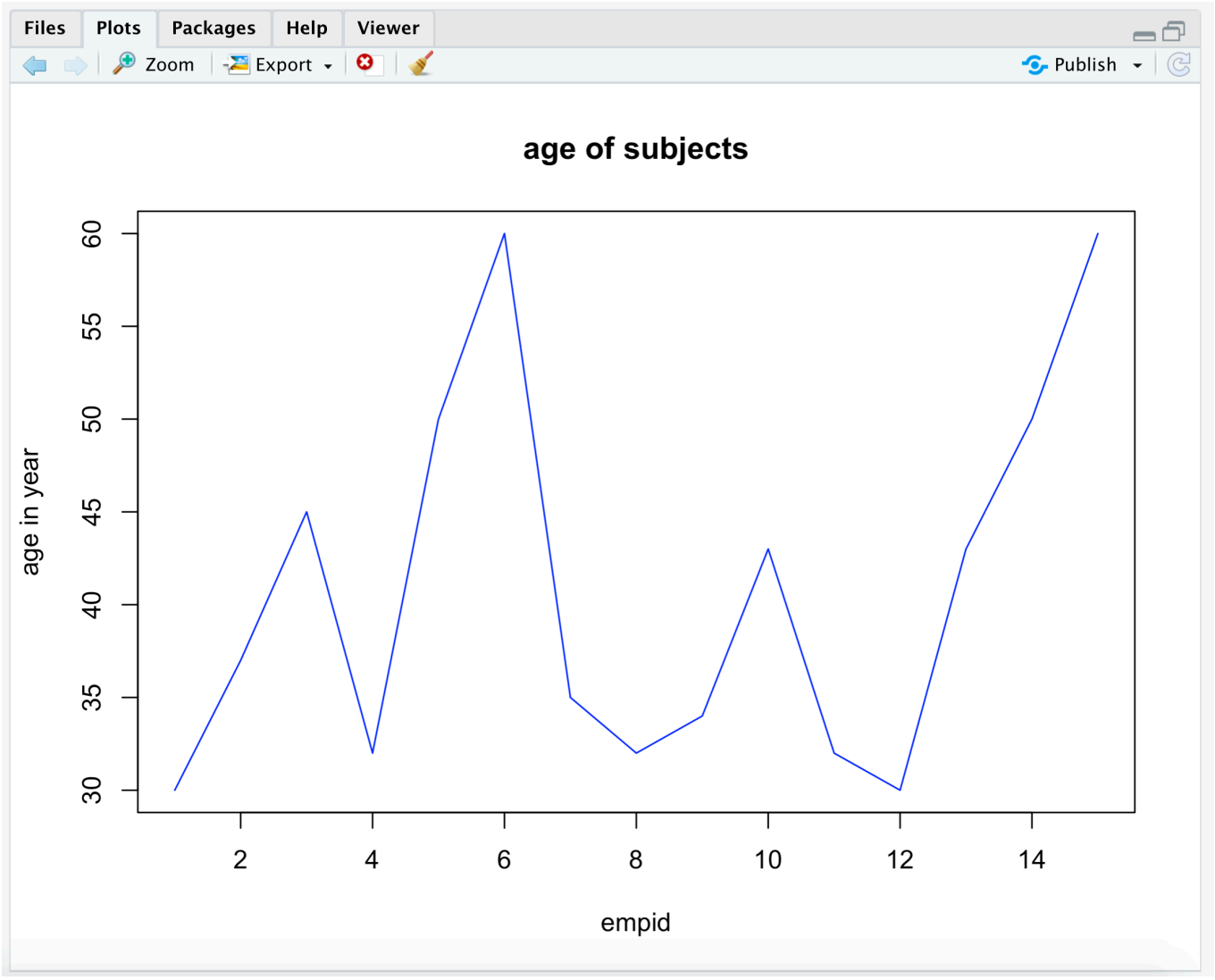
```
14    14  50   0      1
15    15  60   0      2
> empinfo$sex=factor(empinfo$status,labels =
c("male","female"))
> empinfo$sex=factor(empinfo$status,labels =
c("staff","faculty"))
> empinfo
   empid age     sex status
1      1  30   staff      1
2      2  37   staff      1
3      3  45 faculty      2
4      4  32 faculty      2
5      5  50   staff      1
6      6  60   staff      1
7      7  35   staff      1
8      8  32 faculty      2
9      9  34 faculty      2
10    10  43   staff      1
11    11  32 faculty      2
12    12  30   staff      1
13    13  43 faculty      2
14    14  50   staff      1
15    15  60 faculty      2
> gender_male=subset(empinfo,empinfo$sex=='male')
> gender_male
[1] empid  age    sex    status
<0 rows> (or 0-length row.names)
>
gender_female=subset(empinfo,empinfo$sex=='female')
> gender_female
[1] empid  age    sex    status
<0 rows> (or 0-length row.names)
>
status_staff=subset(empinfo,empinfo$status=='staff')
> status_staff
[1] empid  age    sex    status
<0 rows> (or 0-length row.names)
>
status_faculty=subset(empinfo,empinfo$status=='facul
ty')
```

```
> status_faculty
[1] empid  age    sex    status
<0 rows> (or 0-length row.names)
> summary(empinfo)
     empid           age             sex
status
 Min.   : 1.0   Min.   :30.00   staff  :8   Min.
:1.000
 1st Qu.: 4.5   1st Qu.:32.00   faculty:7   1st
Qu.:1.000
 Median : 8.0   Median :37.00               Median
:1.000
 Mean   : 8.0   Mean   :40.87               Mean
:1.467
 3rd Qu.:11.5   3rd Qu.:47.50               3rd
Qu.:2.000
 Max.   :15.0   Max.   :60.00               Max.
:2.000
> summary(empinfo$age)
   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
  30.00   32.00   37.00   40.87   47.50   60.00
> summary(empinfo$gender)
Length  Class   Mode
     0   NULL   NULL
> summary(gender_male)
     empid           age           sex        status
 Min.   : NA   Min.   : NA   staff  :0   Min.   : NA
 1st Qu.: NA   1st Qu.: NA   faculty:0   1st Qu.: NA
 Median : NA   Median : NA               Median : NA
 Mean   :NaN   Mean   :NaN               Mean   :NaN
 3rd Qu.: NA   3rd Qu.: NA               3rd Qu.: NA
 Max.   : NA   Max.   : NA               Max.   : NA
> summary(gender_female)
     empid           age           sex        status
 Min.   : NA   Min.   : NA   staff  :0   Min.   : NA
 1st Qu.: NA   1st Qu.: NA   faculty:0   1st Qu.: NA
 Median : NA   Median : NA               Median : NA
 Mean   :NaN   Mean   :NaN               Mean   :NaN
 3rd Qu.: NA   3rd Qu.: NA               3rd Qu.: NA
 Max.   : NA   Max.   : NA               Max.   : NA
```

```
> summary(status_staff)
     empid           age            sex         status
 Min.   : NA   Min.   : NA   staff  :0   Min.   : NA
 1st Qu.: NA   1st Qu.: NA   faculty:0   1st Qu.: NA
 Median : NA   Median : NA               Median : NA
 Mean   :NaN   Mean   :NaN               Mean   :NaN
 3rd Qu.: NA   3rd Qu.: NA               3rd Qu.: NA
 Max.   : NA   Max.   : NA               Max.   : NA
> summary(status_faculty)
     empid           age            sex         status
 Min.   : NA   Min.   : NA   staff  :0   Min.   : NA
 1st Qu.: NA   1st Qu.: NA   faculty:0   1st Qu.: NA
 Median : NA   Median : NA               Median : NA
 Mean   :NaN   Mean   :NaN               Mean   :NaN
 3rd Qu.: NA   3rd Qu.: NA               3rd Qu.: NA
 Max.   : NA   Max.   : NA               Max.   : NA
> table1=table(empinfo$sex)
> table1

  staff faculty
      8       7
> table2=table(empinfo$status)
> table2

1 2
8 7
> table3=table(empinfo$gender)
> table3
< table of extent 0 >
> plot(empinfo$age,type="l",main = "age of
subjects",xlab = "empid",ylab="age in
year",col="blue")
> ?plot
> help(plot)
```


Files
Plots
Packages
Help
Viewer
Zoom
Export
Publish
age of subjects
age in year
30
35
40
45
50
55
60
2
4
6
8
10
12
14
empid