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REGISTRATION NO OF STUDENT:

20BCE1798

SLOT: L19+L20

DATE: 9TH March,2021

LAB EXPERIMENT 2

PLOTTING OF GRAPHS

AIM:

To perform Graphical representations using R.

QUESTION:

Create a data frame with the following descriptions

	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

1. Find the Summary statistics for male and female employees data

Syntax

```
empinfo = read.csv("D:/R_codes/assign2.csv")
empinfo

factor(empinfo$sex,labels=c("male","female"))
factor(empinfo$status,labels=c("staff","faculty"))

male = subset(empinfo, empinfo$sex=='male')
female = subset(empinfo, empinfo$sex=='female')

summary(m)
summary(f)
```

Output

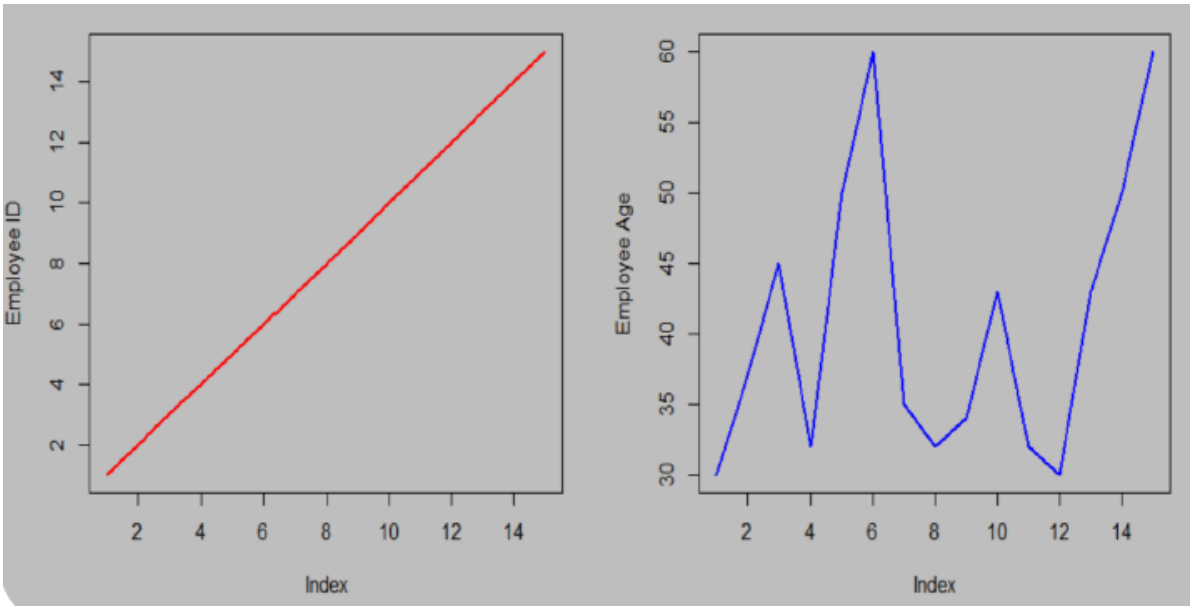
```
>
> summary(m)
     empID            age             sex        status
 Min.   : 1.000   Min.   :30.00   Min.   :0   Min.   :1.0
 1st Qu.: 6.000   1st Qu.:32.00   1st Qu.:0   1st Qu.:1.0
 Median : 9.000   Median :39.00   Median :0   Median :1.5
 Mean   : 8.625   Mean   :40.88   Mean   :0   Mean   :1.5
 3rd Qu.:11.750   3rd Qu.:46.25   3rd Qu.:0   3rd Qu.:2.0
 Max.   :15.000   Max.   :60.00   Max.   :0   Max.   :2.0
> summary(f)
     empID            age             sex        status
 Min.   : 2.000   Min.   :30.00   Min.   :1   Min.   :1.000
 1st Qu.: 4.500   1st Qu.:33.00   1st Qu.:1   1st Qu.:1.000
 Median : 6.000   Median :37.00   Median :1   Median :1.000
 Mean   : 7.286   Mean   :40.86   Mean   :1   Mean   :1.429
 3rd Qu.:10.500   3rd Qu.:46.50   3rd Qu.:1   3rd Qu.:2.000
 Max.   :13.000   Max.   :60.00   Max.   :1   Max.   :2.000
```

2.Draw a line graph for employer id and age

Syntax

```
par(mfrow = c(1,2))
plot(empinfo$empID, type='l', col="green", lwd=2, ylab="Employee ID")
plot(empinfo$age, type='l', col="blue", lwd=2, ylab="Employee Age")
```

Output

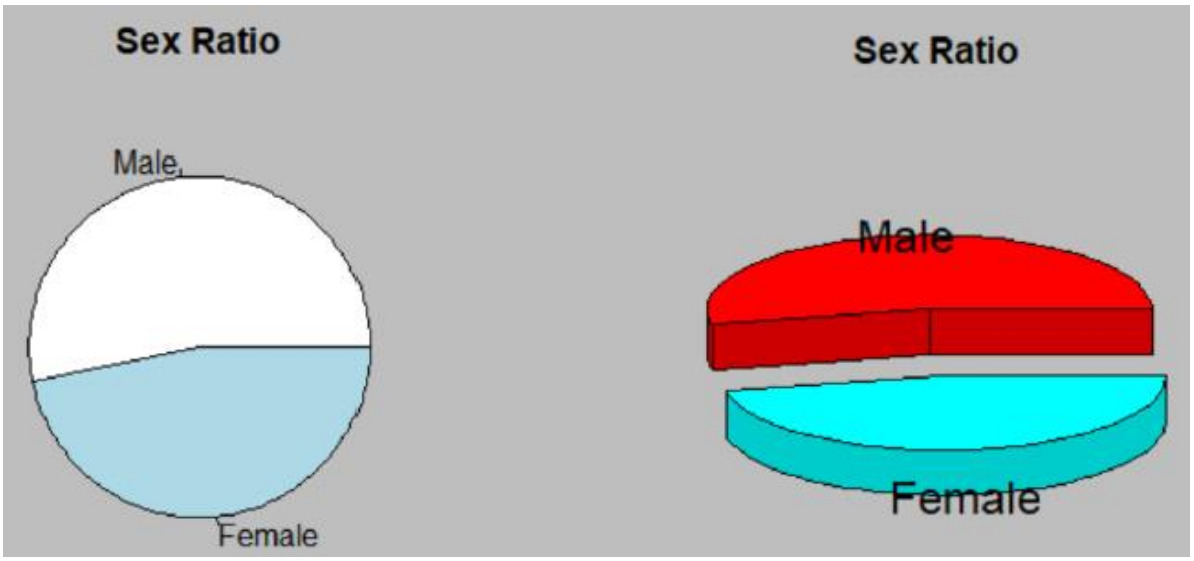


3.Draw a pie chart for segregating sex in employerid

Syntax

```
library(plotrix)
slices = c(nrow(m),nrow(f))
gender = c("Male","Female")
par(bg='gray',mfrow=c(1,2))
pie(slices, labels = gender, main="Sex Ratio")
pie3D(slices, labels = gender, explode=0.3, main="Sex Ratio")
```

Output



4, Draw a bar chart for staff and faculty

Syntax

```
#4) A bar chart for staff and faculty

barplot(table(r1$status))
```

Output