

EXPERIMENT 1:

Question:-

Create your own (Student Record which comprises of Name, Register Number, School, Year, Hosteller/Day Scholar, Gender, Age, DOB) dataset and do the summary statistics and graphs with interpretation

CODE:

```
name=C('ram','ravi','laxmi','siva','ujwal','pradeep','anjum','la  
sya','kamal','kruthi')  
regno=c('19BEC1234','19BCE3456','19BEC1001','19BLC1235',  
'19BEC1678','17BEC1276','18BCE1001','19BLC1290','17BEC1  
009','19BLC231')  
school=c(0,1,0,0,1,0,0,1,1,1)  
accom=c(1,0,1,1,0,1,0,0,1,1)  
sex=c(0,0,1,0,0,0,1,1,0,1)  
age=c(19,18,17,19,18,19,17,19,19,18)  
studentinfo=data.frame(name,regno,school,accom,sex,age)  
studentinfo$school=factor(studentinfo$school,labels=c('SENS  
E','SCOPE'))  
studentinfo$accom=factor(studentinfo$accom,labels=c('Host  
eller','Dayscholar'))  
studentinfo$sex=factor(studentinfo$sex,labels=c('Male','Fem  
ale'))  
print(studentinfo)  
summary(studentinfo)
```

```
plot(studentinfo$age,type='l',main='age of  
students',col='green')
```

```
table1=table(studentinfo$accom)
```

```
table2=table(studentinfo$school,studentinfo$sex)
```

```
pie(table1)
```

```
hist(studentinfo$age)
```

```
barplot(table2,beside =T,xlim = c(1,15),ylim = c(0,5),col =  
c('green','red'))
```

```
boxplot(studentinfo$age~studentinfo$accom,col=c('red','blue'))
```

OUTPUTS:

```
regno=c('19BEC1234','19BCE3456','19BEC1001','19BLC1235','19BEC1678','17BEC1276','18BCE1001','19BLC1290','17BEC1009','19BLC21')
school=c(0,1,0,0,1,0,0,1,1,1)
accom=c(1,0,1,1,0,1,0,0,1,1)
sex=c(0,0,1,0,0,0,1,1,0,1)
age=c(19,18,17,19,18,19,17,19,19,18)
studentinfo=data.frame(name,regno,school,accom,sex,age)
studentinfo$school=factor(studentinfo$school,labels=c('SENSE','SCOPE'))
studentinfo$accom=factor(studentinfo$accom,labels=c('Hosteller','Dayscholar'))
studentinfo$sex=factor(studentinfo$sex,labels=c('Male','Female'))
print(studentinfo)
  name      regno school      accom      sex age
1 ram 19BEC1234  SENSE Dayscholar   Male  19
2 ravi 19BCE3456  SCOPE  Hosteller   Male  18
3 iaxmi 19BEC1001  SENSE Dayscholar  Female  17
4 siva 19BLC1235  SENSE Dayscholar   Male  19
5 ujwal 19BEC1678  SCOPE  Hosteller   Male  18
6 pradeep 17BEC1276  SENSE Dayscholar   Male  19
7 anjum 18BCE1001  SENSE  Hosteller  Female  17
8 lasya 19BLC1290  SCOPE  Hosteller  Female  19
```

```
summary(studentinfo)
```

name	regno	school	accom	sex	age
length:10	Length:10	SENSE:5	Hosteller :4	Male :6	Min. :17.0
Class :character	Class :character	SCOPE:5	Dayscholar:6	Female:4	1st Qu.:18.0
Mode :character	Mode :character				Median :18.5
					Mean :18.3
					3rd Qu.:19.0
					Max. :19.0

```
boxplot(studentinfo$age~studentinfo$accom,col=c('red','blue'))
```

```
plot(studentinfo$age,type='l',main='age of students',col='green')
```

```
table1=table(studentinfo$accom)
```

```
table2=table(studentinfo$school,studentinfo$sex)
```

```
pie(table1)
```

```
hist(studentinfo$age)
```

```
barplot(table2,beside=T,xlim=c(1,15),ylim=c(0,5),col=c('green','red'))
```

```
pie(table2)
```

```
0 lasya 19BLC1290  SCOPE  Hosteller  Female  19
9 kamal 17BEC1009  SCOPE Dayscholar   Male  19
10 kruthi 19BLC231  SCOPE Dayscholar  Female  18
```

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```

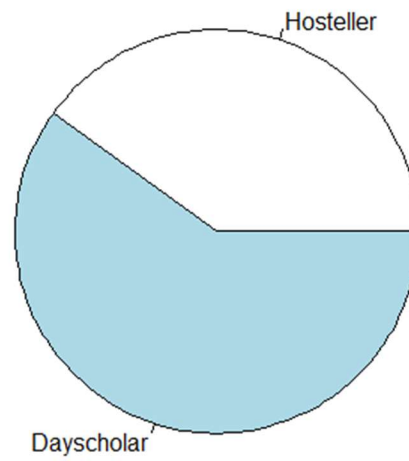
```
>
```

```
>
```

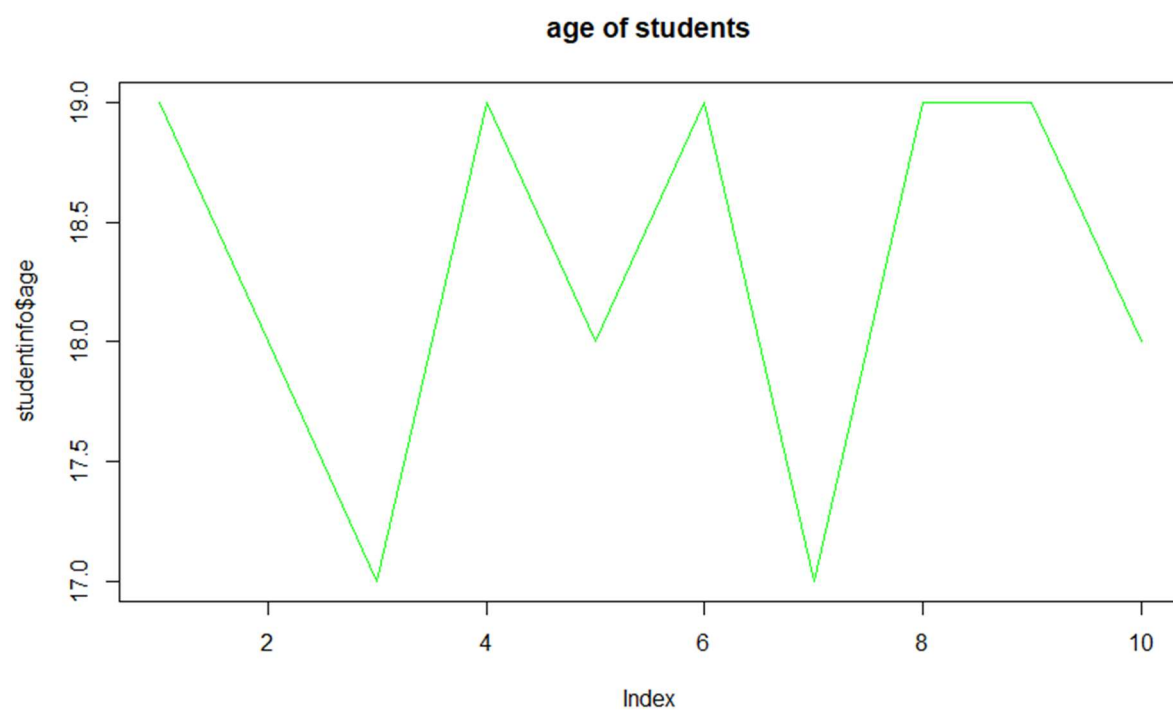
```
> summary(studentinfo)
```

name	regno	school	accom	sex	age
Length:10	Length:10	SENSE:5	Hosteller :4	Male :6	Min. :17.0
Class :character	Class :character	SCOPE:5	Dayscholar:6	Female:4	1st Qu.:18.0
Mode :character	Mode :character				Median :18.5
					Mean :18.3
					3rd Qu.:19.0
					Max. :19.0

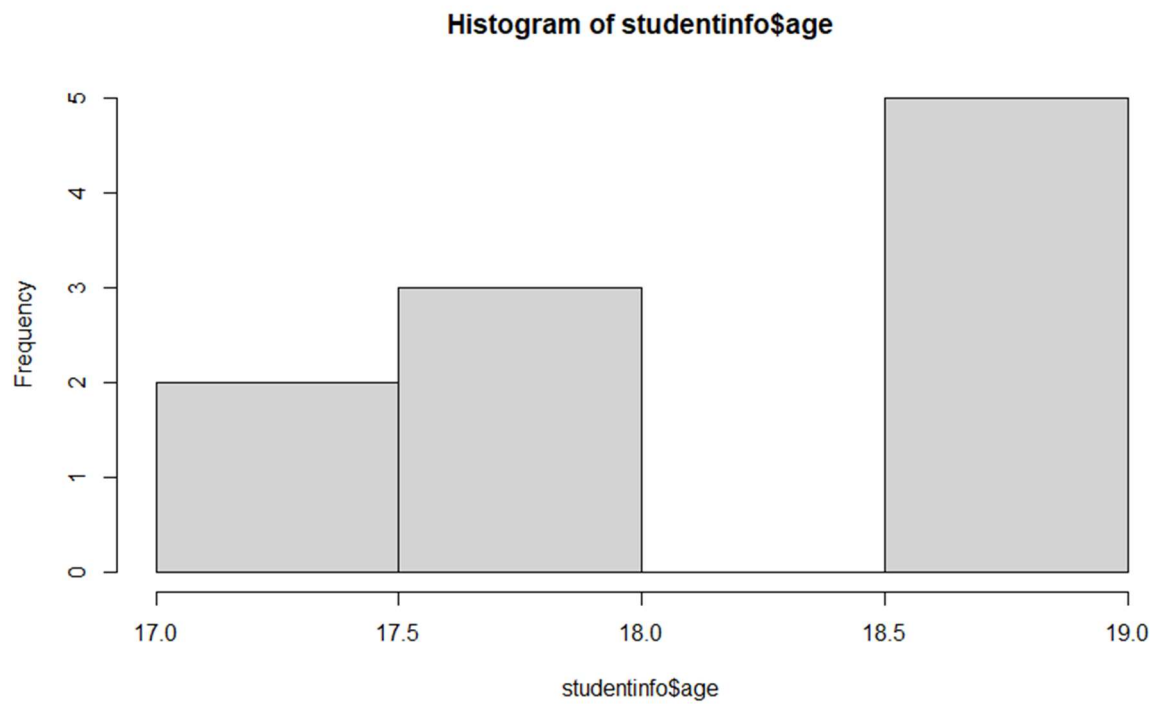
PIE CHART:



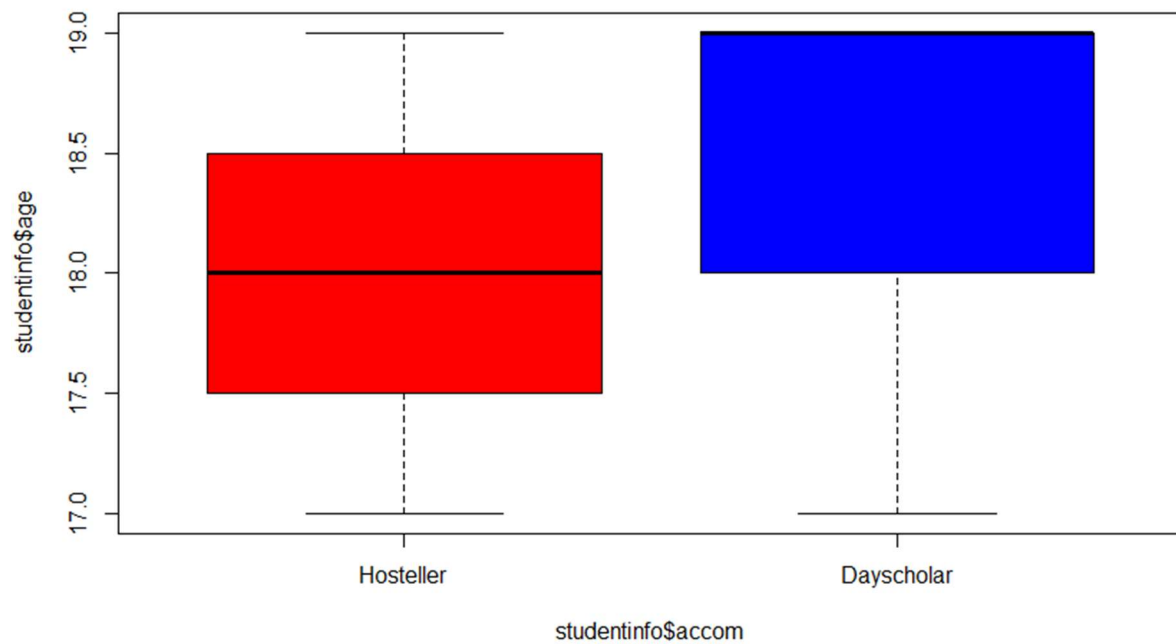
PLOT:



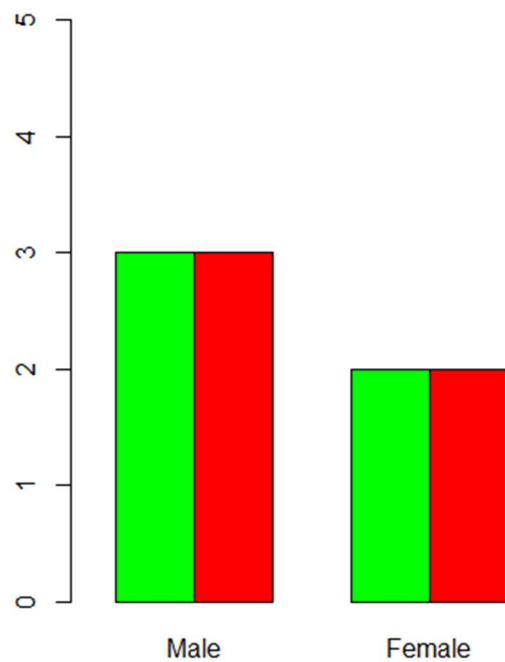
HISTOGRAM:



BOXPLOT:



BARPLOT:



TABLES:

studentinfo	10 obs. of 6 variables
values	
accom	num [1:10] 1 0 1 1 0 1 0 0 1 1
age	num [1:10] 19 18 17 19 18 19 17 19 19 18
name	chr [1:10] "ram" "ravi" "iaxmi" "siva" "ujwal" "pradeep" "anjum" "lasya" ...
regno	chr [1:10] "19BEC1234" "19BCE3456" "19BEC1001" "19BLC1235" "19BEC1678" ...
school	num [1:10] 0 1 0 0 1 0 0 1 1 1
sex	num [1:10] 0 0 1 0 0 0 1 1 0 1
table1	'table' int [1:2(1d)] 4 6

studentinfo	10 obs. of 6 variables
values	
accom	num [1:10] 1 0 1 1 0 1 0 0 1 1
age	num [1:10] 19 18 17 19 18 19 17 19 19 18
name	chr [1:10] "ram" "ravi" "iaxmi" "siva" "ujwal" "pradeep" "anjum" "lasya" ...
regno	chr [1:10] "19BEC1234" "19BCE3456" "19BEC1001" "19BLC1235" "19BEC1678" ...
school	num [1:10] 0 1 0 0 1 0 0 1 1 1
sex	num [1:10] 0 0 1 0 0 0 1 1 0 1
table1	'table' int [1:2(1d)] 4 6
table2	'table' int [1:2, 1:2] 3 3 2 2