

# ParthShah\_M1\_Project1.R

prbsh

2022-01-16

```
#Name  
print("Parth Shah")
```

```
## [1] "Parth Shah"
```

```
#Install vcd package  
r=getOption("repos")  
r["CRAN"]="https://cran.r-project.org/"  
options(repos=r)  
install.packages("vcd")
```

```
## Installing package into 'C:/Users/prbsh/Documents/R/win-library/4.1'  
## (as 'lib' is unspecified)
```

```
## package 'vcd' successfully unpacked and MD5 sums checked  
##  
## The downloaded binary packages are in  
## C:\Users\prbsh\AppData\Local\Temp\Rtmpu8qAPz\downloaded_packages
```

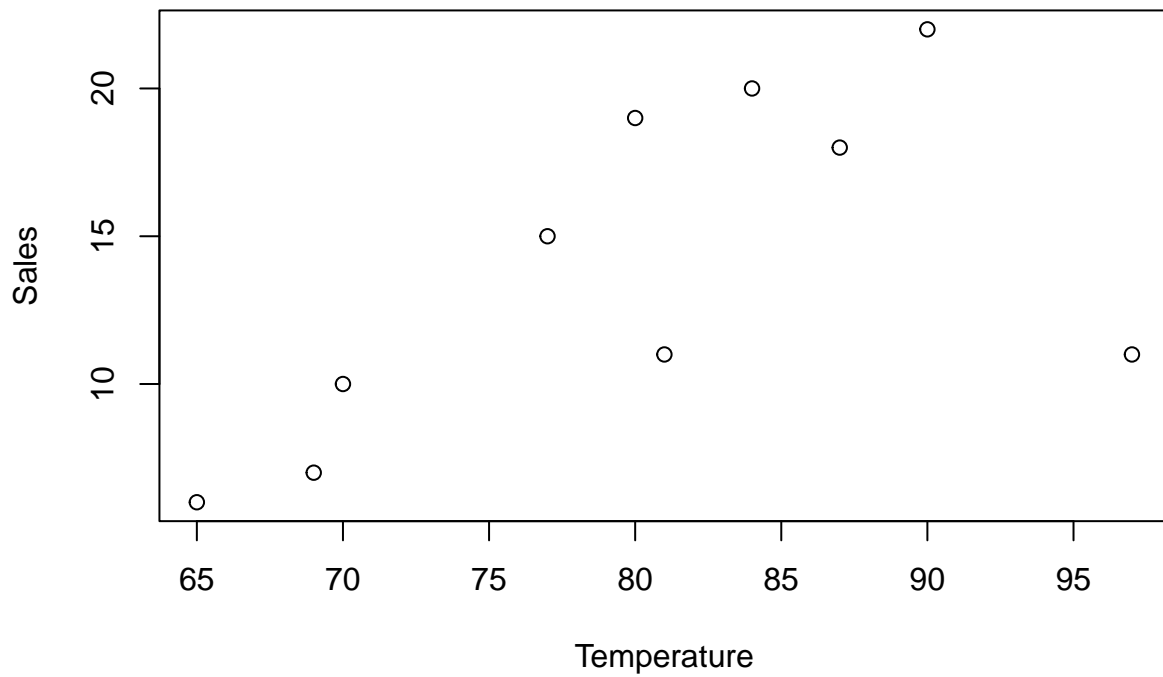
```
#Import vcd library  
library(vcd)
```

```
## Loading required package: grid
```

```
#Sales data  
Sales <- c(7, 11, 15, 20, 19, 11, 18, 10, 6, 22)
```

```
#Temperature data  
Temperature <- c(69, 81, 77, 84, 80, 97, 87, 70, 65, 90)
```

```
#Plot sales ~ Temperature  
plot(Sales ~ Temperature)
```



```
#Mean
mean(Temperature)
```

```
## [1] 80
```

```
#Remove element
Sales <- Sales[-3]
Sales
```

```
## [1] 7 11 20 19 11 18 10 6 22
```

```
#Insert element
Sales <- c(Sales[1:2], 16, Sales[3:9])
Sales
```

```
## [1] 7 11 16 20 19 11 18 10 6 22
```

```
#Create name in vector
name <- c("Tom", "Dick", "Harry")
name
```

```
## [1] "Tom" "Dick" "Harry"
```

```
#Creating matrix
matrix(1:10 , nrow = 5 , ncol = 2)
```

```
##      [,1] [,2]
## [1,]    1    6
## [2,]    2    7
## [3,]    3    8
## [4,]    4    9
## [5,]    5   10
```

```
#Dataframes
icSales <- data.frame(Sales, Temperature)
icSales
```

```
##      Sales Temperature
## 1         7          69
## 2        11          81
## 3        16          77
## 4        20          84
## 5        19          80
## 6        11          97
## 7        18          87
## 8        10          70
## 9         6          65
## 10       22          90
```

```
#Dataframe structure
structure(icSales)
```

```
##      Sales Temperature
## 1         7          69
## 2        11          81
## 3        16          77
## 4        20          84
## 5        19          80
## 6        11          97
## 7        18          87
## 8        10          70
## 9         6          65
## 10       22          90
```

```
#Dataframe summary
summary(icSales)
```

```
##      Sales      Temperature
## Min.   : 6.00   Min.   :65.00
## 1st Qu.:10.25   1st Qu.:71.75
## Median :13.50   Median :80.50
## Mean   :14.00   Mean   :80.00
## 3rd Qu.:18.75   3rd Qu.:86.25
## Max.   :22.00   Max.   :97.00
```

```
#Import data
library(readxl)
Student <- read_excel("C:/Users/prbsh/Desktop/Student.xlsx")
View(Student)
```

```
#display names of students
ls(Student)
```

```
## [1] "First"          "Last"           "Math"           "Science"
## [5] "Social Studies" "StudentID"
```