DhruvangPatel_M1_Project1.R

dhruvang

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```
#name
print("Dhruvang Patel")
```

```
## [1] "Dhruvang Patel"
```

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

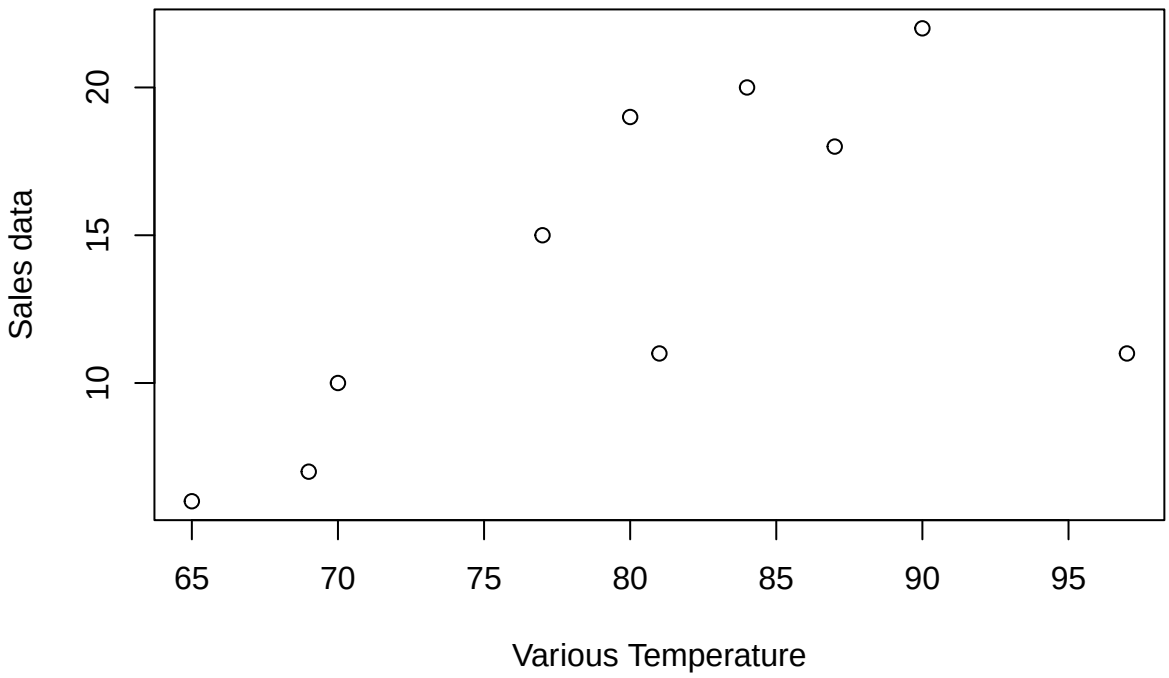
```
## Installing package into 'C:/Users/dhruvang/Documents/R/win-library/4.1'
## (as 'lib' is unspecified)
```

```
## package 'vcd' successfully unpacked and MD5 sums checked
##
## The downloaded binary packages are in
##  C:\Users\dhruvang\AppData\Local\Temp\Rtmp4kNoSy\downloaded_packages
```

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

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

```
#Load Sales data
Sales <- c(7, 11, 15, 20, 19, 11, 18, 10, 6, 22)
#Load Temperature data
Temperature <- c(69, 81, 77, 84, 80, 97, 87, 70, 65, 90)
#Plot Data
plot(Sales ~ Temperature,
     xlab = "Various Temperature",
     ylab = "Sales data")
```




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

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

```
#Remove 3rd 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
name <- c("Tom", "Dick", "Harry")
name
```

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

```r
#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
```

```r
#Create 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
```

```r
#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
```

```r
#summary of Dataframe
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
```

```r
#Import students data
library(readxl)
Student <- read_excel("~/R/ALY 6000/Module 1/Student.xlsx")
View(Student)
#display names of students
ls(Student)
```

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