**Module 2: Additional Exercises with Answers**

**1. Create a new variable 'b' with value 1947.01 and check the class of 'b'.**

b<- 1947.01  
class(b)

## [1] "numeric"

**2. Convert 'b' from previous exercise to character and store the result into a new variable ‘b\_char’.**

b\_char<-as.character(b)  
class(b\_char)

## [1] "character"

**3. Create a vector containing following mixed elements {1, 'a', 2, 'b'} and find out its class**

a<- c(1, 'a', 2, 'b')  
class(a)

## [1] "character"

**3. Create a dataframe and name it DF. This dataframe should contain Three columns with the following names C1, C2 and C3. C1 should contain numeric values 1 and 4.37. C2 should contain “Red” and “Blue” and C3 should contain TRUE and FALSE.**

DF<-data.frame(C1=c(1,4.37), C2=c("Red", "Blue"), C3=c(TRUE, FALSE))  
DF

## C1 C2 C3  
## 1 1.00 Red TRUE  
## 2 4.37 Blue FALSE

**4. Select and print C1 column of the DF dataframe in the previous example.**

print(DF$C1)

## [1] 1.00 4.37

**5. Consider the following dataframe:**

DF<-data.frame(V1=1:6, Countries=c('US', 'UK','UK', 'India','China','India'))

**Show the frequency (i.e. count) of each of the countries in the data frame.**

table(DF$Countries)

##   
## China India UK US   
## 1 2 2 1

**6. Define a variable x=0.75. write a code to crat a variable y whose value is dependent on the value of x. If x is positive, y should be set to 14 otherwise it should be set -19.7. Change the value of x to -1 and evaluate your code again.**

x=0.75  
  
if (x>0){  
 y=14  
   
}else{  
 y=-19.7  
}  
  
print(x)

## [1] 0.75

print(y)

**after changing the x to -1:**

x=-1  
  
if (x>0){  
 y=14  
   
}else{  
 y=-19.7  
}  
  
print(x)

## [1] -1

print(y)

## [1] -19.7