7. Write R program to:
a. Create two matrices and perform multiplication & division on those matrices.

```
#Matrix Multiplication in R ---------> https://www.youtube.com/watch?v=70ihEedr-JU

# Create two 3 x 3 matrixes.
m1 = matrix(1:9, nrow = 3,ncol=3,byrow=TRUE)
print("Matrix-1:")
print(m1)
m2 = matrix(2:10, nrow = 3,ncol=3,byrow=TRUE)
print("Matrix-2:")
print(m2)


result = m1 %*% m2
print("Result of multiplication")
print(result)

result = m1 / m2
print("Result of division:")
print(result)
```

b. Create a data frame and print the: data frame, structure of data frame and summary of data frame.

```
#DataFrames in R----------------------> https://www.youtube.com/watch?v=kJk0NrzqZxw
# Create the data frame.
emp.data <- data.frame(
  emp_id = c (1:5),
  emp_name = c("Ravi","Asha","Satish","Shilpa","Shiva"),
  salary = c(84623,45515,62311,72129,82343),

  start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11",
    "2015-03-27")),

)
# Print the data frame.
print(emp.data)

# Get the structure of the data frame.
str(emp.data)

# Print the summary.
print(summary(emp.data))
```

c. Create a Bar chart and sketch the Bar chart by taking months as input & plot it against revenue. Also, add legend to the chart that includes regions.

```
# Create the data for the chart
H <- c(7,12,28,3,41)
M <- c("Mar","Apr","May","Jun","Jul")

# Give the chart file a name
png(file = "barchart_months_revenue.png")

# Plot the bar chart
barplot(H,names.arg=M,xlab="Month",ylab="Revenue",col="blue",
main="Revenue chart",border="red")

# Save the file
dev.off()
```