SP23-BCS-037

FATIMA MEHBOOB

IDS-MT SOLUTION

**QUESTION # 1: VECTOR**

> # Salary Vector

> salary <- c(50000, 60000, 70000, 80000, 50000, 65000, 45000, 60000)

> # Calculate Average Salary

> average\_salary <- mean(salary)

> average\_salary

[1] 60000

> # Age Vector

> age <- c(34, 29, 40, 30, 35, 27, 41, 30)

> # Find Minimum and Maximum Age

> min\_age <- min(age)

> max\_age <- max(age)

>

> min\_age

[1] 27

> max\_age

[1] 41

> employee1 <- list(

+ Name = "X",

+ Department = "HR",

+ Age = 34,

+ Salary = 50000

+ )

> # Display each element

> employee1

$Name

[1] "X"

$Department

[1] "HR"

$Age

[1] 34

$Salary

[1] 50000

> employee1$Name

[1] "X"

> employee1$Department

[1] "HR"

> employee1$Age

[1] 34

> employee1$Salary

[1] 50000

> # Variables

> salary <- c(50000, 60000, 70000, 80000, 50000, 65000, 45000, 60000)

> experience <- c(5, 3, 10, 4, 2, 7, 9, 6)

> # Mean

> mean\_salary <- mean(salary)

> mean\_experience <- mean(experience)

> # Standard Deviation

> sd\_salary <- sd(salary)

> sd\_experience <- sd(experience)

> # Correlation

> correlation <- cor(salary, experience)

> # Display results

> mean\_salary

[1] 60000

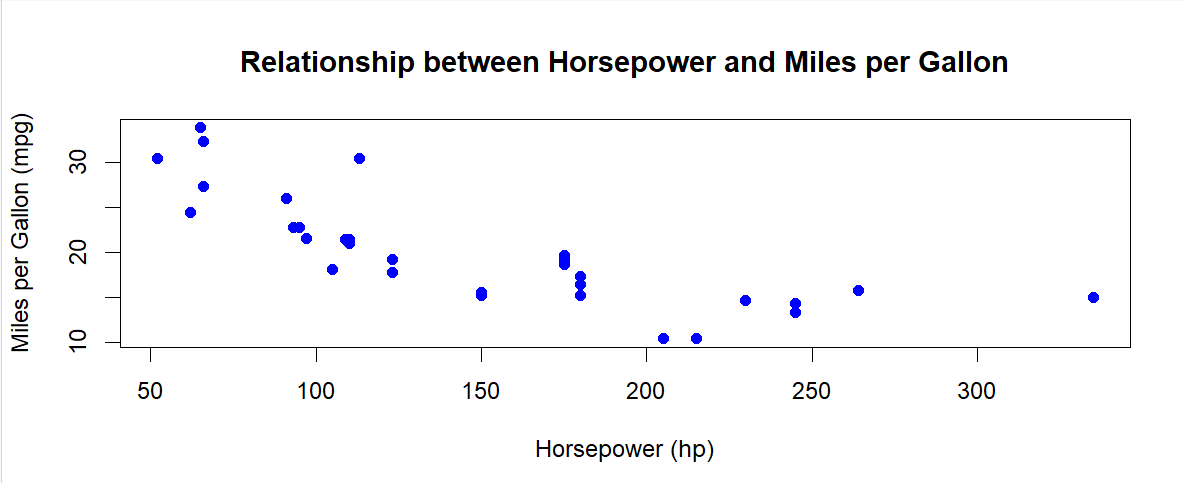
> sd\_salary

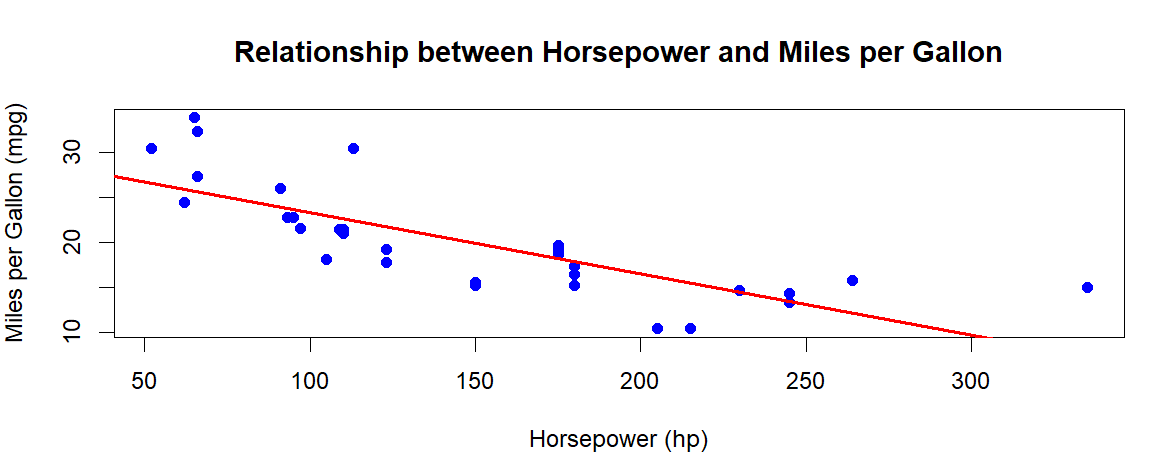
[1] 11649.65

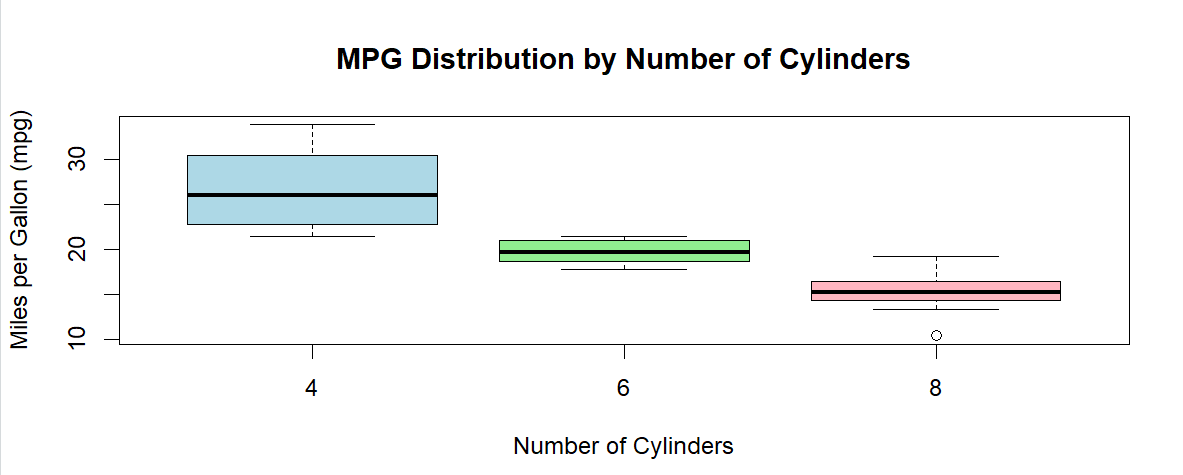
> correlation

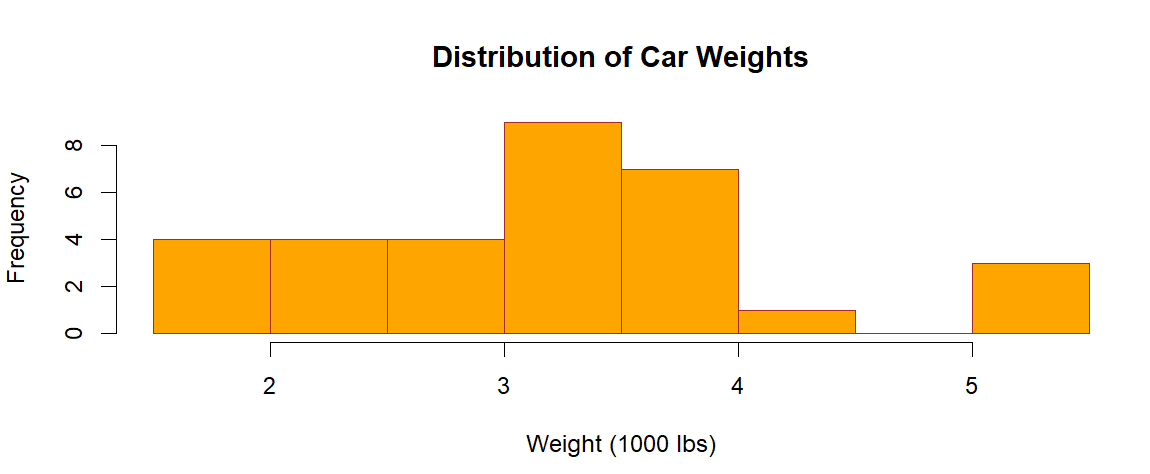
[1] 0.04355036

**QUESTION # 2:**

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