C240424_1

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Problem 1-1:

Problem 1-2:

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https://37743.github.io

Categorical Data Analysis

RMarkdown

The sum of 2 and 3 is: 5

- arbitrary list
  - bullet point 1
  - bullet point 2
  - bullet point 3

Problem 1-3:

```
data("iris")
head(iris)
```

```
##   Sepal.Length Sepal.Width Petal.Length Petal.Width Species
## 1          5.1         3.5          1.4         0.2  setosa
## 2          4.9         3.0          1.4         0.2  setosa
## 3          4.7         3.2          1.3         0.2  setosa
## 4          4.6         3.1          1.5         0.2  setosa
## 5          5.0         3.6          1.4         0.2  setosa
## 6          5.4         3.9          1.7         0.4  setosa
```

```
mean_sepal <- mean(iris$Sepal.Length)
mean_petal <- mean(iris$Petal.Length)
mean_sepal
```

```
## [1] 5.843333
```

```
mean_petal
```

```
## [1] 3.758
```

```
var_sepal <- var(iris$Sepal.Length)
var_petal <- var(iris$Petal.Length)
var_sepal
```

```
## [1] 0.6856935
```

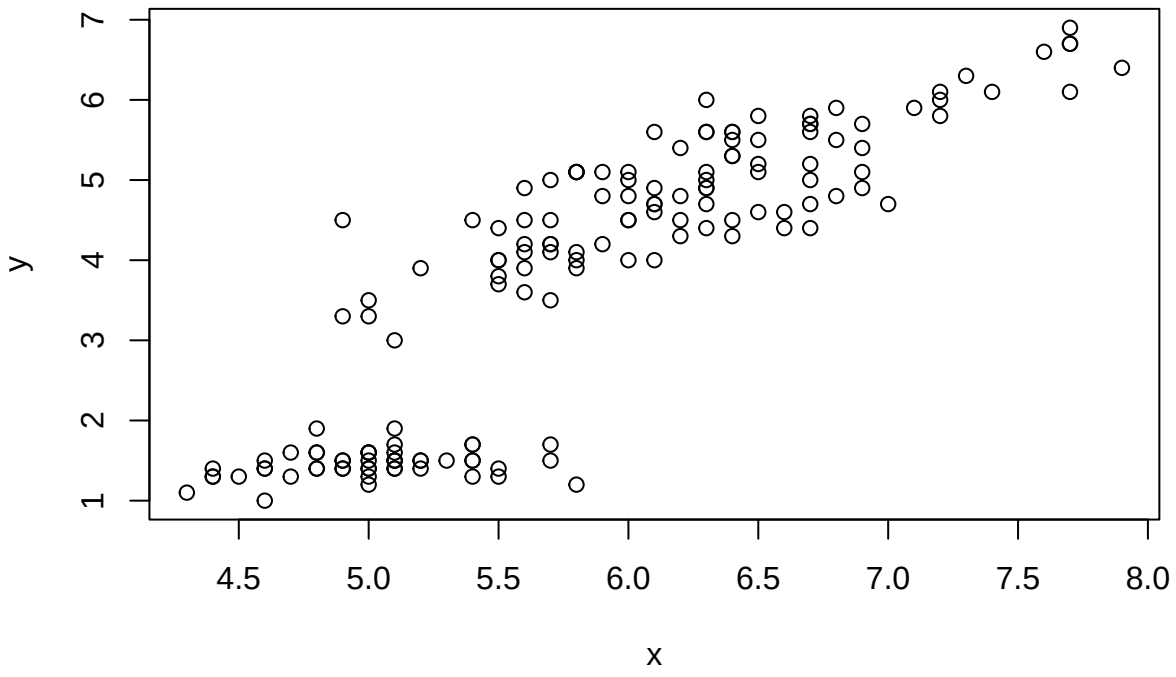
```
var_petal
```

```
## [1] 3.116278
```

```
x <- iris$Sepal.Length
y <- iris$Petal.Length
cor(x, y)
```

```
## [1] 0.8717538
```

```
plot(x,y)
```



According to the graph illustrated above, and the output value of correlation (0.8717538), the Sepal Length (x) and Petal Length (y) features are positively correlated. (Directly Proportional)