Week 1 - Pod - Submission

## Question 1

Given the following data

| x | 2 | 3 | 5 | 6 | 1 | 9 | 10 | 15 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| y | 1 | 4 | 6 | 4 | 4 | 3 | 20 | 25 |

1. Calculate the mean, standard deviation, and variance of
2. Calculate the correlation of and
3. Run a linear model when regressing on .

## Question 2\*

Given the following data

| x | 2 | 3 | 5 | 6 | 1 |
| --- | --- | --- | --- | --- | --- |
| y | 1 | 4 | 6 | 4 | 4 |

1. Calculate the mean, standard deviation, and variance of
2. Calculate the correlation of and
3. Run a linear model when regressing on .

## Question 3

1. Import in R the Automobile UK Collision Claims dataset at

* [Collision Claims](https://instruction.bus.wisc.edu/jfrees/jfreesbooks/Regression%20Modeling/BookWebDec2010/CSVData/AutoCollision.csv) or [Alternative Link](data/AutoCollision.csv)

1. Use the View function to view the data

## Question 4

Run linear regression to regress the Claim\_Count on the Severity. Give the summary of the model.

## Question 5\*

In this question, we will use the Automobile Insurance Claims dataset at the below link:

[Automobile Insurance Claims](https://instruction.bus.wisc.edu/jfrees/jfreesbooks/Regression%20Modeling/BookWebDec2010/CSVData/NAICExpense.csv)

1. Import the following dataset into Rstudio.
2. View the dataset.
3. Run linear model to regress PAID on AGE. Report the summary of this model.