

CHAPTER 6

CONCLUSION

The conclusion of this simple linear regression study in answering the prediction of data values obtained from Kaggle.com:

1. The result of Constanta (a) and Coefficient (b) is :

$$\alpha = \frac{(\sum y)(\sum x^2) - (\sum x)(\sum xy)}{n(\sum x^2) - (\sum x)^2} = -0.46181061339172225$$

and

$$\beta = \frac{n(\sum xy) - (\sum x)(\sum y)}{n(\sum x^2) - (\sum x)^2} = 1.014335349349752$$

Based on the calculation results α and β above, the linear regression formula for the prediction value can be determined, namely $y = -0.46181061339172225 + 1.014335349349752x$.

2. The result of the number of predictions of the value $X = 40$ using the SQL program obtained the number of 40.11160337
3. The result of the Mean Absolute Error calculation from the prediction of linear regression with the formula :

$$MAE = \sum \left(\frac{|y^1 - y|}{n} \right) = 2.413538407$$

Error! Number cannot be represented in specified format.