**Life Expectancy Data**

**Inferences:**

**Analysis of Simple Linear Regression:**

* The model was employed to analyze the association between Alcohol consumption (independent variable) and Life expectancy (dependent variable).
* The estimated Life expectancy when Alcohol consumption is zero. This value acts as the baseline for the models predictions.
* R-Squared achieved a value of 0.18, indicating the models limited ability to explain variability.
* Only 18% of the changes in Life expectancy can be attributed to Alcohol consumption, implying that factors such as healthcare, economic status, and lifestyle significantly impact Life expectancy.

**Analysis of Multiple Linear Regression:**

* The (MSE) of 13.0270, measuring the average squared difference between actual and predicted Life Expectancy. Considering the typical range of Life Expectancy (e.g., 60 to 80 years), this error is relatively low and acceptable.
* Intercept of 281.26 represents the predicted Life Expectancy when all predictors are zero.
* The R square of 0.8166, indicating that 81.66% of the variability in Life Expectancy is explained by the predictors, represents a strong relationship between the features and the target.