# Question 4

As provided in the complimentary R file we get the Residual standard error: **0.1745** for linear model

These Test Errors from the KNN methods are as follows

1. KNN K=1 0.025
2. KNN K=3 0.0302
3. KNN K=5 0.0302
4. KNN K=7 0.0302
5. KNN K=9 0.035
6. KNN K=11 0.035
7. KNN K=13 0.0329
8. KNN K=15 0.038

It clearly evident that ***KNN With K = 1*** is good because test error is very low compare to linear model.