**R Commands [Linear Regression]**

**File: slr.csv and mtcars.csv**

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| Sr No | Purpose | Command |
| 1 | Import file slr.csv |  |
| 2 | Plot scatter diagram |  |
| 3 | Find correlation |  |
| 4 | Build regression model and find summary |  |
| 5 | Find predicted values |  |
| 6 | Insert predicted values in data file |  |
| 7 | Find error terms |  |
| 8 | Install package ‘car’ for finding Durbin Watson Statistics |  |
| 9 | Add best fit line in scatter plot |  |
| 10 | Check assumption 1: Linearity |  |
| 11 | Check assumption 1: Constant Error Variance |  |
| 12 | Check assumption 3: Independence of Error |  |
| 13 | Check assumption 4: Normality |  |
| 14 | Save predicted values and error terms in a new file slr1 |  |
| 15 | Multiple Regression  Import mtcars.csv  Install package ‘car’ then call ‘car’ |  |
| 16 | Build multiple regression model |  |
| 17 | Find summary |  |
| 18 | Find variance inflation factor |  |
| 19 | Find vif>5 |  |