**How to handle Multicollinearity**

1. **Drop** the **variables** causing the problem.

– If using a large number of X-variables, a stepwise **regression** could be used to determine which of the variables to drop.

– Removing **collinear X-variables** is the simplest method of solving the multicollinearity problem.

2. If all the X-variables are retained, then **avoid making inferences** about the **individual** **parameters**. Also, restrict inferences about the mean value of Y of values to X that lie in the experimental region.

3. **Re-code** the form of the **independent** **variables**.

For example, if x1 and x2 are collinear, you might try using x1 and the ratio x2/x1 instead.

4. **Ridge and Lasso Regression**– This is an alternative estimation procedure to ordinary least squares. Penalizes for the duplicate information and shrinks or drops to zero the parameters of a regression model.

5. By **standardizing** **the variables** i.e, by subtracting the mean value or taking the deviated forms of the variables (xi=Xi-mean(X))

7. **Increase** in **sample size** may sometimes solve the problem of multicollinearity.