5. You might have observed that sometimes the value of VIF is infinite. Why does this happen?

## ANSWER -->

**Variance Inflation Factor**: It describes multi-collinearity in our model. It selects one of the variable among parameters as target and other variables as feature.

If a variable has a relation with all other variable then, i.e is perfectly collinear and completely defined by all other variables, VIF is very high i.e. infinite ( $\infty$ ).

$$VIF = 1 / (1-R^2)$$
, if  $R^2 = 1$ ,  $VIF = \infty$ .

