

## LASSO Regression.....

$$\Rightarrow \sum_{i=1}^n (Y_i - \hat{Y}_i)^2 + \lambda \|W\|_1$$

The Difference is that, in Lasso Regression we generally use the L1 "Norm" or the Absolute Values of "W". Rest the implementation is same.

### Key Points of Lasso Regression.

(i) As, we already talked about that, Lasso Regression is "L1 Norm" Regression technique where we include the absolute values of "W".

(ii) Note  $\Rightarrow$  The coefficient values of Lasso Regression can be Zero '0' if the value of ' $\lambda$ ' increases.

(iii) Lasso Regression have a good concept which it uses as the ' $\lambda$ ' value increases.

#### Feature Selection

[As, the ' $\lambda$ ' value increases  $\uparrow\uparrow$ .]

It starts

doing the

Feature Selection

$\therefore$  This is helpful that Feature Selection is happening because it leads to reduction in the Data Dimensionality...

(iv) The Bias and Variance have same relationship with the Lasso Regression as it is having with the Ridge Regression...