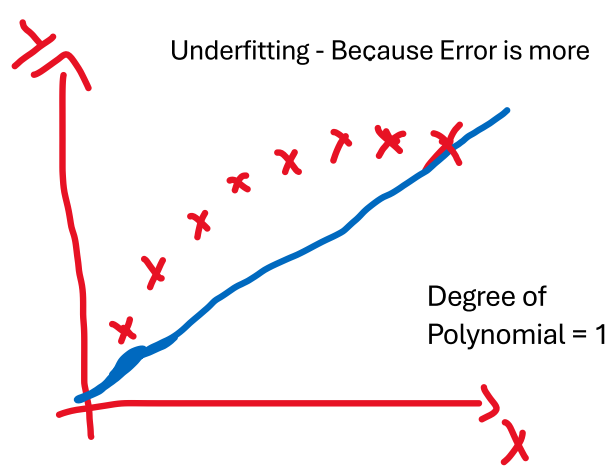


Bias And Variance In Depth Intuition

Bias = Error of Training data
Variance = Error of Test data

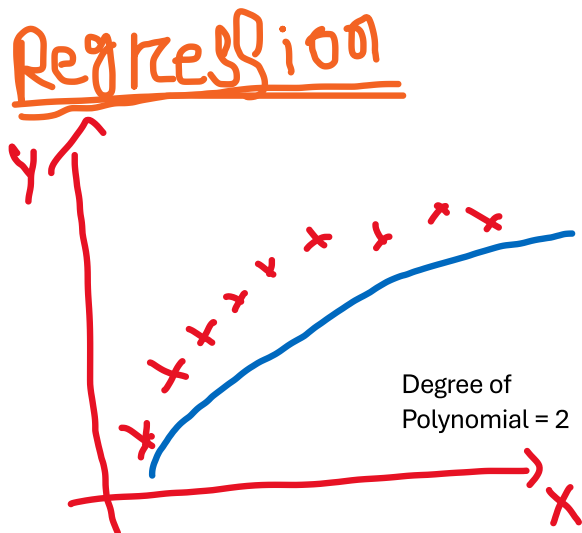


In this scenario(Underfitting)

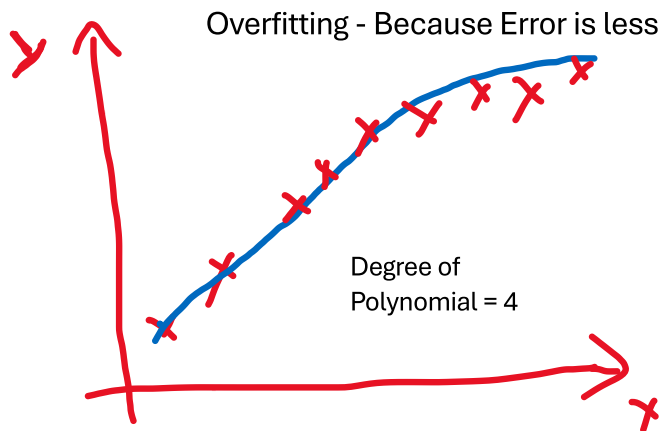
For Tranning data accuracy is ↓

For Test data accuracy is ↓

High Bias
High Variance



Low Bias
Low Variance



In this scenario(Overfitting)

For Tranning data accuracy is ↑

For Test data accuracy is ↓

Low Bias
High Variance

Classification

Model-1

Tranning Error = 1%

Test error = 20%

Low Bias
High Variance

This Scenario Basically
Called as Overfitting

Model-2

Tranning Error = 25%

Test error = 26%

High Bias
High Variance

This Scenario Basically
Called as Underfitting

Model-3

Tranning Error = < 1%

Test error = 10%

Low Bias
Low Variance

