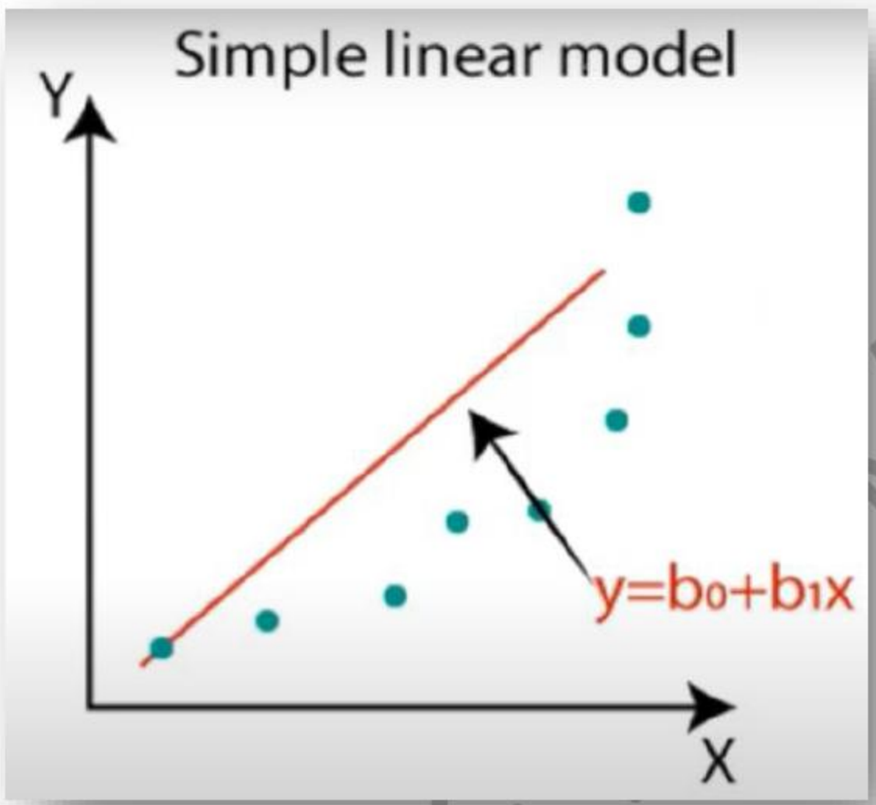
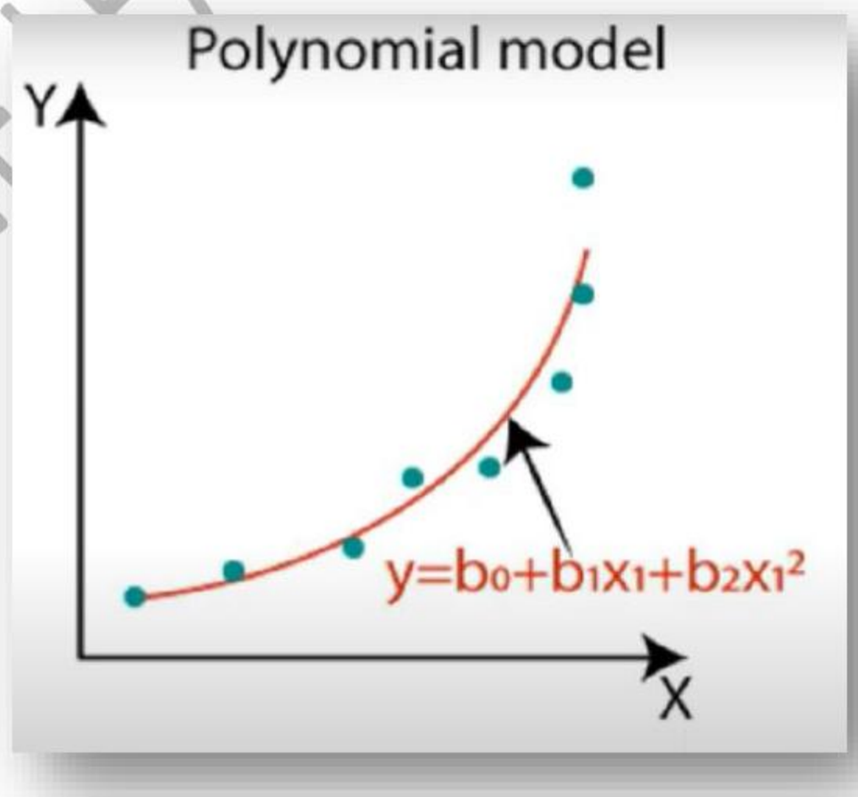
Chapter 5: Polynomial Regression

- It is a form of regression analysis in which the relationship between independent variable x and the dependent variable y is modelled as an n^{th} degree polynomial in x.
- If the dataset is linear then simple linear regression can provide us good result.



- If the dataset is non-linear then linear model will hardly cover any data point, due to which error rate will be high and hence accuracy will be decreased.



- Hence if the datasets in non-linear then, we should use polynomial regression model so that most of the data points are covered and hence increases the models accuracy.