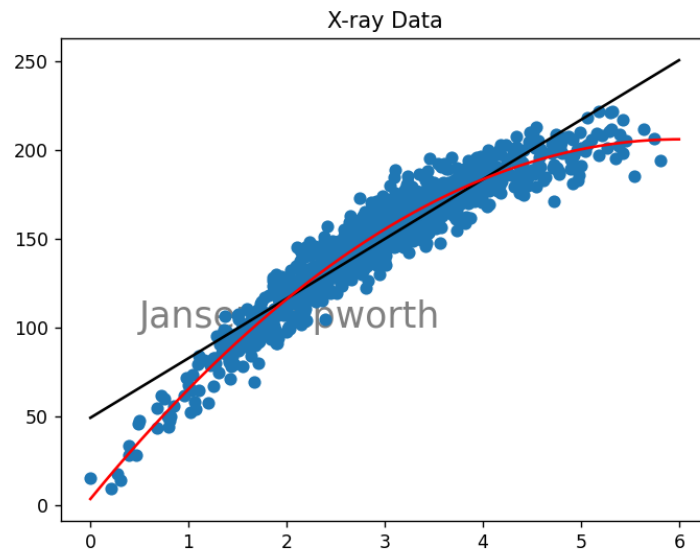# Machine Learning Tutorial 3

A)

B)

1. The quadratic line will have a lower bias as the underlying data is nonlinear, hence this quadratic curve can better fit the underlying data.
2. The linear line will have a lower variance because it is more resilient to the changing data sets. This will result in a lower average error when using multiple data sets of the same class.
3. Use the least squares method; this effectively takes the distance from the predicted line/curve. The aim is to minimise this for each model hence the model with the lowest overall error is best.