

Question 1:

Sol: Learning Rate is hyper parameters in machine learning that helps us to determine the steps size at each iteration as the model learning with minimise errors. It changes and take control on how the model adjust internal parameters with in the model and it's learning .

Actually we should not choose high learning rate for quick result the better and quick model changes the parameter but it will loose data factors and behaviour we should go with the low learning rate.

Questions 2:

Sol: one hot encoding is a method to convert categorical data into numerical format each category understands, each category represent binary format data like '1' and '0' to represent the data.

The dimensionality changes after applying this technique, increment in dimensionality as it convert the single columns into categories

Question 3:

Sol: On ipynb file