Numpy, pandas, matplotlib done! (Refer to documentation if needed).

ML Crash Course:

1. Supervised machine learning: ML models learn how to combine inputs to predict the outputs of previously unseen data.
2. Labels and features: Label for output and features of input
3. A model defines the relationship between features and label.
4. A regression model predicts continuous values whereas Classification predicts discrete values.
5. L_2 Loss: squared error.
6. We use gradient descent to update the parameters.
7. Learning rate must be tuned perfectly. Too slow leads to more iterations whereas a high learning rate is also not essential.
8. Learning rate, no. of epoch and batch size
9. **Generalization** refers to your model's ability to adapt properly to new, previously unseen data, drawn from the same distribution as the one used to create the model.
10. An overfit model does good on training data but it can’t do well on the test set data.
11. One of the fundamentals of ML is fitting our data well and keeping it as simply as possible.
12. We divide our data set into 2 parts, training set and test set.
13. Better to have a validation set that helps us to reduce the exposure to test set.
14. The process of creating features from raw data is called feature engineering and we are expected to put a considerable amount of effort into it.
15. The data used for ML models should be processed and any outliers or null values should be removed, data should be scaled for better results.