1. **Introduction to Machine learning**
   1. Why learn Machine learning?
   2. What are the course objectives?
   3. Introduction to Machine Learning.
   4. Difference between Machine Learning.
      1. Supervised Learning
      2. Unsupervised Learning
      3. Reinforcement Learning
   5. Understanding the concepts, methods and models used in Machine Learning.
2. **Data Preprocessing**
   1. Importing the dataset
   2. Importing the Libraries
   3. Missing Data
   4. Categorical Data
   5. Splitting the Dataset into the Training set and Test set
3. **Linear Regression**
   1. Linear Regression Intuition
   2. Maths for Linear Regression
4. **Logistic Regression**
   1. Logistic Regression Intuition
   2. Maths for Logistic Regression
5. **Support Vector Regression (SVR) a. How to get the dataset** 
   1. SVR Intuition
   2. SVR in Python
   3. Python practical implementaion
   4. Hyperparamenter tunning
6. **Decision Tree** 
   1. How to get the dataset
   2. Decision Tree Classification in Python
   3. Python practical implementaion
   4. Hyperparamenter tunning
7. **Ensembel techinique**
8. **Bagging Technique**
   1. Random Forest Classification Intuition
   2. Python practical implementaion
   3. Hyperparamenter tunning
9. **Boosting Technique**
   1. Adaboosting
   2. Python practical implementaion
   3. Hyperparamenter tunning
10. **Naive Bayes** 
    1. Bayes Theorem
    2. Naive Bayes Intuition
    3. Naive Bayes in Python
    4. Python practical implementaion
    5. Hyperparamenter tunning
11. **Clustering Technique (Unsupervised ML Technics)**
12. **K-Means Clustering** 
    1. K-Means - Selecting the Number Of Clusters
    2. K-Means Clustering in Python
    3. Python practical implementaion
    4. Hyperparamenter tunning
13. **NLP(Natural Language processinga. Tokenization** 
    1. Stemming
    2. Lemmatization
    3. Bag of Words
    4. TFIDF
14. **Evaluating Regression Models Performance** 
    1. R-Squared Intuition
    2. Adjusted R-Squared Intuition
    3. Interpreting Linear Regression Coefficients
    4. Regression Model Practice in Python
15. **Evaluating Classification Models Performance** 
    1. Accuracy
    2. Precission
    3. Recall
    4. F1 Score
16. **Important Topics**
17. **Assumption of Linear Regression**
18. **Avoid OverFitting**
19. **Feature selection**
20. **Feature Extraction**
21. **Hyper parameters of all the models Interview Question**
22. **hyper parameter tuning using GridSearchCV**
23. **Outlier Detection Interview Questions**
24. **Roc Auc Curve Interview Question**
25. **Find out best model(Model Selection and Boosting)**
26. **K fold \_Cross validation**
27. **Different ways of Handeling Imbalanced dataset(i.eUsing SMOT)**
28. **Python ML project with Flask Server Deployment**
29. **Dvc**
30. **Mlflow**