[ML Fundamentals](https://pulse.itvedant.com/index.php/topic/update?id=19403&course_id=220)

[Introduction to ML](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19404&course_id=220&preview=on" \o "Add sub topic content)

[ML Modeling Flow](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19405&course_id=220&preview=on" \o "Add sub topic content)

[Prametric and Non Parametric Algorithm](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19406&course_id=220&preview=on" \o "Add sub topic content)

[Types of ML](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19407&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20291&course_id=220&preview=on" \o "Add sub topic content) (0/3)

1 Hrs

[Add Assignments - 3](https://pulse.itvedant.com/index.php/question-bank/create?course_id=220&topic_id=19403) [Test Questions - 8](https://pulse.itvedant.com/index.php/test-question-bank/index?topic_id=19403)

[EDA](https://pulse.itvedant.com/index.php/topic/update?id=19408&course_id=220) (https://www.ashokcharan.com/Marketing-Analytics/~st-regression.php#gsc.tab=0)

https://www.kaggle.com/code/gadigevishalsai/car-sales-price-prediction-eda-regression

[EDA-Info,shape](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19409&course_id=220&preview=on" \o "Add sub topic content)

[Handling Missing Values](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19410&course_id=220&preview=on" \o "Add sub topic content)

[Handling Outliers](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19411&course_id=220&preview=on" \o "Add sub topic content)

[Handling Skewness](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19412&course_id=220&preview=on" \o "Add sub topic content)

[Data Encoding](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19413&course_id=220&preview=on" \o "Add sub topic content)

[Feature Scaling -Normalization and Standardization](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19414&course_id=220&preview=on" \o "Add sub topic content)

[Feature Engineering](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19415&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20292&course_id=220&preview=on" \o "Add sub topic content) (0/0)

6 Hrs

[Add Assignments - 0](https://pulse.itvedant.com/index.php/question-bank/create?course_id=220&topic_id=19408) [Test Questions - 14](https://pulse.itvedant.com/index.php/test-question-bank/index?topic_id=19408)

[Linear Regression](https://pulse.itvedant.com/index.php/topic/update?id=19416&course_id=220)

[Linear Regression with OLS](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19417&course_id=220&preview=on" \o "Add sub topic content)

[Linear Regression with SGD](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19418&course_id=220&preview=on" \o "Add sub topic content)

[Assumptions](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19419&course_id=220&preview=on" \o "Add sub topic content)

[Evaluating Model Parameters](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19420&course_id=220&preview=on" \o "Add sub topic content)

[Polynomial Regression](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19421&course_id=220&preview=on" \o "Add sub topic content)

[Measuring Performance metrics-Lost and Cost Function (MAE,MSE,RMSE,R2 Score)](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19422&course_id=220&preview=on" \o "Add sub topic content)

[L1 and L2 Regularization](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19423&course_id=220&preview=on" \o "Add sub topic content)

[Cross Validation](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19424&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20293&course_id=220&preview=on" \o "Add sub topic content) (0/0)

6 Hrs

[Add Assignments - 0](https://pulse.itvedant.com/index.php/question-bank/create?course_id=220&topic_id=19416) [Test Questions - 31](https://pulse.itvedant.com/index.php/test-question-bank/index?topic_id=19416)

[Logistic Regression](https://pulse.itvedant.com/index.php/topic/update?id=19425&course_id=220)

[Logistic Regression MLE](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19426&course_id=220&preview=on" \o "Add sub topic content)

[Evaluating Model Performance](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19427&course_id=220&preview=on" \o "Add sub topic content)

[Measuring Performance Metrics :Confusion Matrix, Precision ,Recall,F1 score ,ROC AUC etc.](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19428&course_id=220&preview=on" \o "Add sub topic content)

[Bias and Variance Trade off](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19429&course_id=220&preview=on" \o "Add sub topic content)

[Overfitting and Underfitting](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19430&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20295&course_id=220&preview=on" \o "Add sub topic content) (0/0)

4 Hrs

[Add Assignments - 0](https://pulse.itvedant.com/index.php/question-bank/create?course_id=220&topic_id=19425) [Test Questions - 9](https://pulse.itvedant.com/index.php/test-question-bank/index?topic_id=19425)

[ML Fundamental Assessment](https://pulse.itvedant.com/index.php/batch-test/check-available-test?topic_id=20187&course_id=220)

[Decision Tree](https://pulse.itvedant.com/index.php/topic/update?id=19431&course_id=220)

[Introduction to Decision Tree](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19432&course_id=220&preview=on" \o "Add sub topic content)

[Entropy and Information Gain](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19433&course_id=220&preview=on" \o "Add sub topic content)

[Gini Index](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19434&course_id=220&preview=on" \o "Add sub topic content)

[CART and CHAID](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19435&course_id=220&preview=on" \o "Add sub topic content)

[Performance Metrics](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19436&course_id=220&preview=on" \o "Add sub topic content)

[Pruning Techniques](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19437&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20297&course_id=220&preview=on" \o "Add sub topic content) (0/0)

3 Hrs

[Add Assignments - 0](https://pulse.itvedant.com/index.php/question-bank/create?course_id=220&topic_id=19431) [Test Questions - 6](https://pulse.itvedant.com/index.php/test-question-bank/index?topic_id=19431)

[Random Forests](https://pulse.itvedant.com/index.php/topic/update?id=19438&course_id=220)

[Bootstrap Sampling](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19439&course_id=220&preview=on" \o "Add sub topic content)

[Bagging (Bootstrap Aggregation)](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19440&course_id=220&preview=on" \o "Add sub topic content)

[Introduction to Random Forest](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19441&course_id=220&preview=on" \o "Add sub topic content)

[Why Random Forest?](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19442&course_id=220&preview=on" \o "Add sub topic content)

[Performance Metrics](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19443&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20299&course_id=220&preview=on" \o "Add sub topic content) (0/0)

4 Hrs

[Add Assignments - 0](https://pulse.itvedant.com/index.php/question-bank/create?course_id=220&topic_id=19438) [Test Questions - 0](https://pulse.itvedant.com/index.php/test-question-bank/index?topic_id=19438)

[Ensemble Techniques](https://pulse.itvedant.com/index.php/topic/update?id=19444&course_id=220)

[Boosting](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19445&course_id=220&preview=on" \o "Add sub topic content)

[AdaBoost](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19446&course_id=220&preview=on" \o "Add sub topic content)

[Gradient Boosting](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19447&course_id=220&preview=on" \o "Add sub topic content)

[XGBoost](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19448&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20302&course_id=220&preview=on" \o "Add sub topic content) (0/0)

4 Hrs

[Add Assignments - 0](https://pulse.itvedant.com/index.php/question-bank/create?course_id=220&topic_id=19444) [Test Questions - 13](https://pulse.itvedant.com/index.php/test-question-bank/index?topic_id=19444)

[Batch Feedback](https://pulse.itvedant.com/index.php/topic/update?id=20378&course_id=220)

[Neighbours (K-NN)](https://pulse.itvedant.com/index.php/topic/update?id=19449&course_id=220)

[What is K-NN?](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19450&course_id=220&preview=on" \o "Add sub topic content)

[KNN Algorithm](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19451&course_id=220&preview=on" \o "Add sub topic content)

[Working of KNN](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19452&course_id=220&preview=on" \o "Add sub topic content)

[How to Choose value of K?](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19453&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20306&course_id=220&preview=on" \o "Add sub topic content) (0/0)

2 Hrs

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[Support Vector Machines (SVM)](https://pulse.itvedant.com/index.php/topic/update?id=19454&course_id=220)

[Understanding Vectors](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19455&course_id=220&preview=on" \o "Add sub topic content)

[Decision Boundary](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19456&course_id=220&preview=on" \o "Add sub topic content)

[What are support vectors & Hyperplace](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19457&course_id=220&preview=on" \o "Add sub topic content)

[What is Support Vector Machine?](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19458&course_id=220&preview=on" \o "Add sub topic content)

[Working of SVM](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19459&course_id=220&preview=on" \o "Add sub topic content)

[Kernels and Types of Kernel](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19460&course_id=220&preview=on" \o "Add sub topic content)

[Hard Margin & Soft Margin](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19461&course_id=220&preview=on" \o "Add sub topic content)

[SVM for multi-class Classification](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19462&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20308&course_id=220&preview=on" \o "Add sub topic content) (0/0)

4 Hrs

[Add Assignments - 0](https://pulse.itvedant.com/index.php/question-bank/create?course_id=220&topic_id=19454) [Test Questions - 15](https://pulse.itvedant.com/index.php/test-question-bank/index?topic_id=19454)

[Naive Bayes](https://pulse.itvedant.com/index.php/topic/update?id=19463&course_id=220)

[What is Naive Bayes?](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19464&course_id=220&preview=on" \o "Add sub topic content)

[Bayes Theorem](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19465&course_id=220&preview=on" \o "Add sub topic content)

[Types Of Naive Bayes](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19466&course_id=220&preview=on" \o "Add sub topic content)

[Naive Bayes Classifier](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19467&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20310&course_id=220&preview=on" \o "Add sub topic content) (0/0)

2 Hrs

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[ML Intermediate Assessment](https://pulse.itvedant.com/index.php/batch-test/check-available-test?topic_id=20179&course_id=220)

[PCA](https://pulse.itvedant.com/index.php/topic/update?id=19468&course_id=220)

[Principal Component Analysis](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19469&course_id=220&preview=on" \o "Add sub topic content)

[Introduction to Dimentionality Reduction](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19470&course_id=220&preview=on" \o "Add sub topic content)

[What is PCA?](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19471&course_id=220&preview=on" \o "Add sub topic content)

[Computing Compponents in PCA](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19472&course_id=220&preview=on" \o "Add sub topic content)

[Dimentionality Reduction using PCA](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19473&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20311&course_id=220&preview=on" \o "Add sub topic content) (0/0)

2 Hrs

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[K-means](https://pulse.itvedant.com/index.php/topic/update?id=19474&course_id=220)

[Introduction to Clustering](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19475&course_id=220&preview=on" \o "Add sub topic content)

[What is K-Means Clustering?](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19476&course_id=220&preview=on" \o "Add sub topic content)

[K-means Clustering Algorithm](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19477&course_id=220&preview=on" \o "Add sub topic content)

[Choosing the optimum K value (Elbow Method)](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19478&course_id=220&preview=on" \o "Add sub topic content)

[Various Distance Measure](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19479&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20313&course_id=220&preview=on" \o "Add sub topic content) (0/0)

4 Hrs

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[Batch Feedback](https://pulse.itvedant.com/index.php/topic/update?id=20397&course_id=220)

[Hirarchical Clustering](https://pulse.itvedant.com/index.php/topic/update?id=19480&course_id=220)

[Introduction to Hirarchical Clustering](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19481&course_id=220&preview=on" \o "Add sub topic content)

[Dendrogram](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19482&course_id=220&preview=on" \o "Add sub topic content)

[Types of Hirarchical Clustering:Aaggomerative and Divisive](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19483&course_id=220&preview=on" \o "Add sub topic content)

[Cluster Linkage](https://pulse.itvedant.com/index.php/topic/preview-subtopic-content?subtopic_id=19484&course_id=220&preview=on" \o "Add sub topic content)

[Assignment](https://pulse.itvedant.com/index.php/topic/update-preview?id=20317&course_id=220&preview=on" \o "Add sub topic content) (0/0)

2 Hrs

[Add Assignments - 0](https://pulse.itvedant.com/index.php/question-bank/create?course_id=220&topic_id=19480) [Test Questions - 0](https://pulse.itvedant.com/index.php/test-question-bank/index?topic_id=19480)

[ML Final Assessment](https://pulse.itvedant.com/index.php/batch-test/check-available-test?topic_id=20180&course_id=220)

[IBM - DATA ANALYSIS WITH PYTHON](https://pulse.itvedant.com/index.php/topic/update?id=20356&course_id=220)