Week 1

- **Day – 1 :** What is AI, Subsets of AI
- **Day – 2 :** What is Data Science
- **Day – 3 :** AI vs ML vs DL
- **Day – 4 :** Jupyter Notebook Setup
- **Day – 5 :** Jupyter Notebook Walkthrough
- **Day – 6 :** Getting Started with Numpy, Reshape and Random Number Generator
- **Day – 7 :** Arithmetic Operations on Array, Arithmetic Operations on Multiple Arrays

Week 2

- **Day – 1 :** Array Sorting, Arrays Slicing
- **Day – 2 :** Array Merging, Automating using Numpy
- **Day – 3 :** Getting Started with Pandas, Dataset Walkthrough
- **Day – 4 :** Mean, Median & Mode
- **Day – 5 :** Standard Daviation & Variance
- **Day – 6 :** Normal Distribution
- **Day – 7 :** Data Preprocessing - Removing Null Value Rows

Week 3

- **Day – 1 :** Data Analysis - Numeric
- **Day – 2 :** Data Analysis - Categorical
- **Day – 3 :** Data Analysis - Automatic Categorical
- **Day – 4 :** Null Values Handling - Numeric
- **Day – 5 :** Null Values Handling - Categorical
- **Day – 6 :** Null Values Handling on GooglePlaystore Dataset
- **Day – 7 :** Data Analysis with Multiple Columns

Week 4

- **Day – 1 :** Data Analysis using Conditions
- **Day – 2 :** GroupBy in Pandas
- **Day – 3 :** Heart Disease EDA - Introduction to Kaggle
- **Day – 4 :** Heart Disease EDA - Age (DistPlot)
- **Day – 5 :** Heart Disease EDA - Categorical Columns (Pie Charts)
- **Day – 6 :** Heart Disease EDA - ViolinPlot
- **Day – 7 :** Heart Disease EDA - Correlation (HeatMap)

Week 5

- **Day – 1 :** Heart Disease EDA - Correlation (PairPlot)
- **Day – 2 :** Heart Disease EDA - Correlation - (JointPlot)
- **Day – 3 :** Black Friday - Walkthrough
- **Day – 4 :** Black Friday - Analysing Columns
- **Day – 5 :** Black Friday - Analysing Gender
- **Day – 6 :** Black Friday - Analysing Age & Marital Status
- **Day – 7 :** Black Friday - MultiColumn Analysis

Week 6

- **Day – 1 :** Black Friday - Occupation and Products Analysis
- **Day – 2 :** Black Friday - Combining Gender & Marital Status
- **Day – 3 :** GDP Analysis - Assignment
- **Day – 4 :** GDP Analysis - Dataset Walkthrough
- **Day – 5 :** GDP Analysis - GDP Growth of a Country
- **Day – 6 :** GDP Analysis - GDP Growth on whole Dataset
- **Day – 7 :** GDP Analysis - Plotting Graphs Using Plotly

Week 7

- **Day – 1 :** GDP Analysis - Plotting Graphs in Bulk
- **Day – 2 :** GDP Analysis - Compare GDP across Countries
- **Day – 3 :** GDP Analysis - Compare GDP across Countries Advanced
- **Day – 4 :** GDP Analysis - Compare GDP Growth Comparison
- **Day – 5 :** Linear Regression Intuition
- **Day – 6 :** Forward Propagation and Cost Function in Linear Regression
- **Day – 7 :** Forward Propagation and Cost Function in Linear Regression

Week 8

- **Day – 1 :** Updating the Parameters in Linear Regression
- **Day – 2 :** Detailed Mathematics behind Linear Regression
- **Day – 3 & 4 :** Linear Regression Model from Sratch
- **Day – 5 :** Linear Regression Model Prediction
- **Day – 6 :** Linear Regression Model using ScikitLearn library
- **Day – 7 :** Multiple Linear Regression Intuition

Week 9

- **Day – 1 :** Multiple Linear Regression Hands On
- **Day – 2 :** Linear Regression Model Assumption
- **Day – 3 :** Linear Regression Assumptions Hands On
- **Day – 4 :** Ordinary Least Square (OLS) Method
- **Day – 5 :** Multiple Linear Regression using OLS
- **Day – 6 :** Polynomial Linear Regression Intuition
- **Day – 7 :** Polynomial Linear Regression Hands On

Week 10

- **Day – 1 :** Support Vector Regression Intuition
- **Day – 2 :** Support Vector Regression On Insurance Cost Prediction
- **Day – 3 :** Decision Tree Regression Intuition
- **Day – 4 :** Decision Tree Regression Hands On
- **Day – 5 & 6 :** Random Forest Regression Intuition
- **Day – 7 :** Logistic Regression Intuition

Week 11

- **Day – 1 :** KNN Algorithm Intuition
- **Day – 2 :** Naive Bayes Intuition
- **Day – 3 :** Project Titanic - Classification

- **Day – 4 :** Introduction to K-Means Clustering
- **Day – 5 :** K-Means Initialise Centers
- **Day – 6 :** E step in K-Means
- **Day – 7 :** How to Plot Clusters

Week 12

- **Day – 1 :** M Step in K-Means
- **Day – 2 :** Random Init improvement in K-Means
- **Day – 3 :** Feature Selection - with Correlation Matrix
- **Day – 4 :** Feature Selection - with Extra Tree Classifier
- **Day – 5 :** Feature Selection - with SelectKBest Method
- **Day – 6 :** Principal Component Analysis (PCA) Intuition
- **Day – 7 :** PCA Implementation

Week 13

- **Day – 1 :** TSNE Intuition
- **Day – 2 :** TSNE Implementation
- **Day – 3 :** K-Fold Cross Validation Intuition
- **Day – 4 :** K-Fold Cross Validation Implementation
- **Day – 5 :** Reading Data from Text-file
- **Day – 6 :** Reading Data from Text-file Corpus
- **Day – 7 :** Text Preprocessing

Week 14

- **Day – 1 :** Advance Text Preprocessing
- **Day – 2 & 3 :** Writing Data on a text-file
- **Day – 4 :** Getting Started with NLTK
- **Day – 5 :** Stemming & Lematization
- **Day – 6 :** StopWords Removal
- **Day – 7 :** Corpus & Vocabulary

Week 15

- **Day – 1 :** Word Cloud
- **Day – 2 :** Text Encoding - Decoding
- **Day – 3 :** Text Encoding - Decoding | Without Stop Words
- **Day – 4 :** Text Encoding - Decoding | Without Stop Words
- **Day – 5 :** One Hot Encoding