**MAI272 - Advanced Machine Learning**

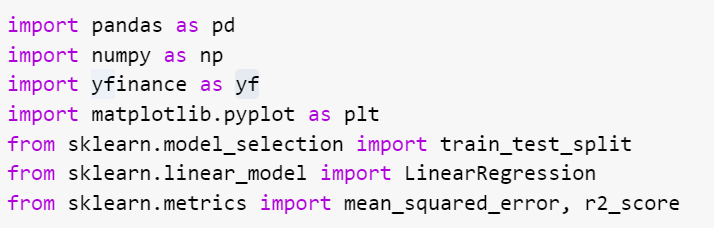
Register Number : 2448503

Name : Abhijith E

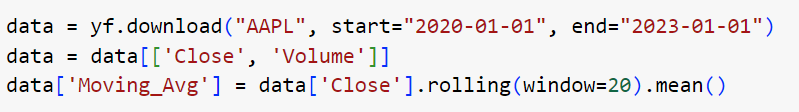
Experiment Number : 1

Date : 18/10/2024

1. .Data Collection and Preprocessing:
2. Importing Required Libraries:



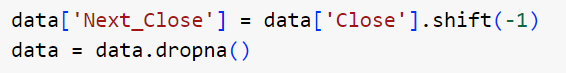
1. Collecting Stock Data and Find Moving Average:



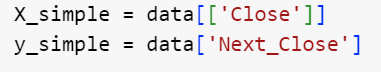
1. Removing Missing Data:



1. Preparing Data for Simple Prediction:



1. .Simple Linear Regression Implementation:
2. Setting Features and Target for Simple Prediction:

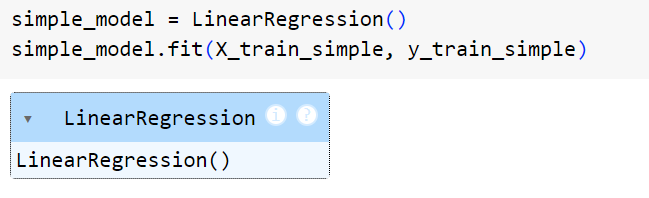


1. Splitting Data into Training and Testing:

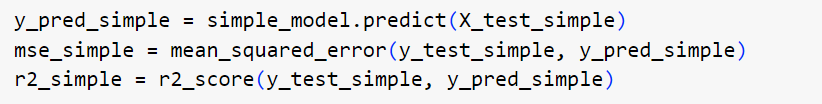


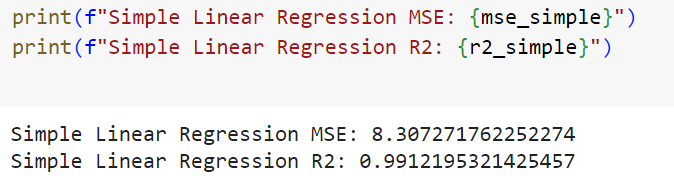
X\_train\_simple, X\_test\_simple, y\_train\_simple, y\_test\_simple = train\_test\_split(X\_simple, y\_simple, test\_size=0.2, random\_state=42)

1. Training the Model:

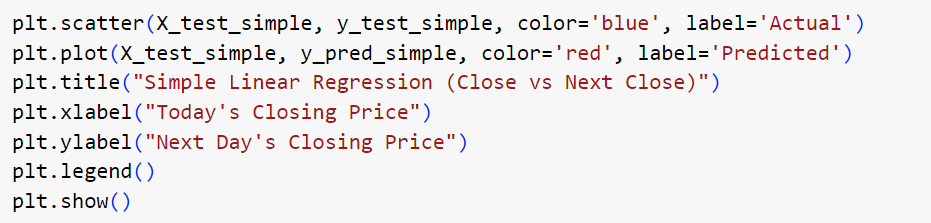


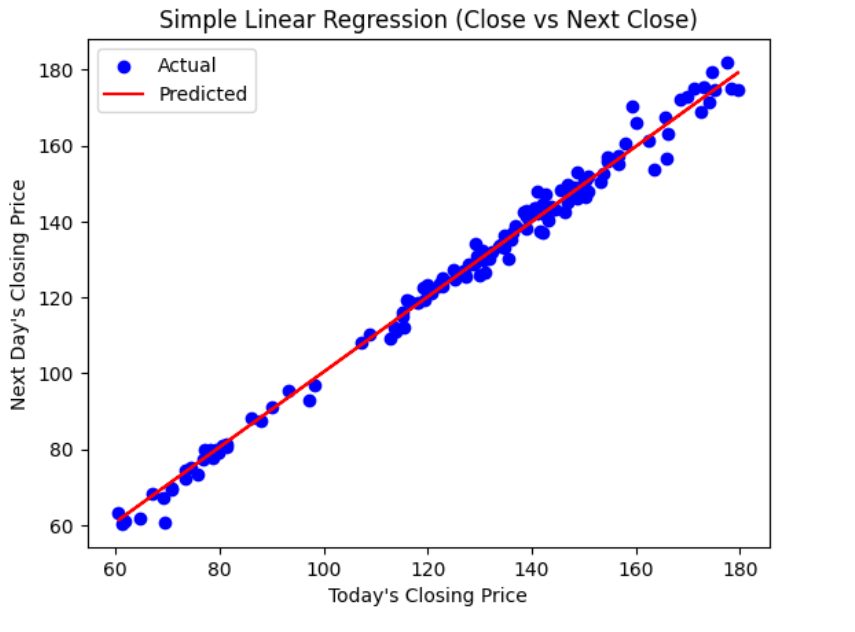
1. Making Predictions and Checking Accuracy:



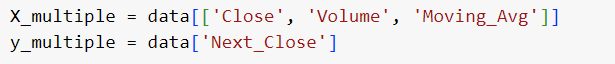


1. Plotting the Simple Linear Regression:





1. .Multiple Linear Regression Implementation:
2. Preparing Data for Multiple Prediction:

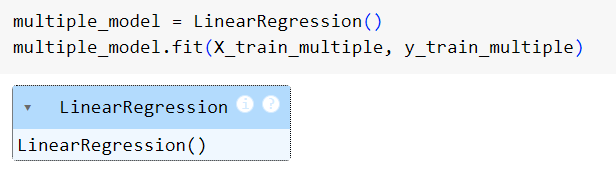


1. Splitting Data Again:

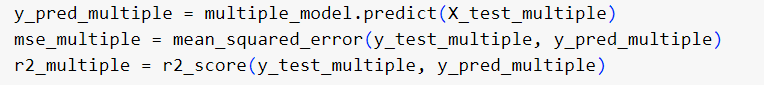


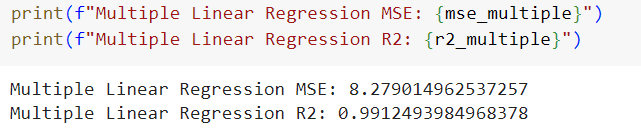
X\_train\_multiple, X\_test\_multiple, y\_train\_multiple, y\_test\_multiple = train\_test\_split(X\_multiple, y\_multiple, test\_size=0.2, random\_state=42)

1. Training the Multiple Linear Regression Model:



1. Making Predictions and Checking Accuracy (Multiple Features):





1. Plotting the Results for Multiple Linear Regression:

