**PHASE-2**

**BID DATA ANALYSIS WITH IBM CLOUD DATABASES**

**Introduction:**

Stock prediction using the Random Forest Algorithm involves leveraging historical stock data to make future price forecasts. By utilizing cloud storage ,this process becomes more scalable and efficient , as it allows for easy access to vast datasets and seamless collaboration among researchers and analysts.The Random Forest Algorithm ,a machine learning technique , helps analyze this data and make predictions based on patterns and features.

**Steps involved in stock prediction using random forest algorithm:**

**Step 1 :**  Import all the libraries that are required for the creating the model.

**Step 2 :** Import the dataset which is extracted from the kaggle or from any other sources.

**Step 3 :** Check for the null values and check the datatype for each column if the date column is in the form of string means convert it into date format.

**Step 4 :** Define the start and end date from the dataset.

**Step 5 :** Plot the graph for the closing price of the dataset with date as x-axis and closing price as y-axis and scale down the dataset from 0 to 1.

**Step 6 :** Split the dataset into training and testing dataset.

**Step 7 :** Print the number of values in training and testing dataset .The training dataset should be more when compared to testing dataset.

**Step 8 :** Print the training and testing dataset’s RMSE,MSE,MAE,variance regression score,R2 score,MGD score,MPD score.

**Step 9 :** Evaluate the model for calculating the predicted closing price.

**Step 10 :** Finally Graph the Original and Predicted closing price of the stock.