Title: STOCK PRICE PREDICTION

Introduction:

Data pre-processing for stock price prediction involves cleaning and transforming the data to make it suitable for analysis. It includes tasks like handling missing values, dealing with outliers, and normalizing the data.

Steps involved in data preprocessing and loading in stock price prediction:

1. Collect historical stock price data

2. Clean the data by handling missing values and removing duplicates.

3. Select relevant features for prediction.

4. Transform the data by normalizing or scaling the features.

5. Encode categorical variables into numerical values.

6. Split the data into training and testing sets.

7. Load the preprocessed data into a suitable data structure.

CODE:

Import pandas as pd

From sklearn.preprocessing import StandardScaler

From sklearn.model\_selection import train\_test\_split

From sklearn.ensemble import RandomForestRegressor

Data = pd.read\_excel(r”D:\Visual studio\Course\Naan Mudhalvan\Data Science\MSFT.xlsx”)

Date = data[‘Date’]

X\_drop = [‘Date’,’Adj Close’]

X = data.drop(columns=X\_drop)

Y = data[‘Adj Close’]

Date = pd.to\_datetime(date, format=”%d-%m-%Y”)

X[‘Year’] = date.dt.year

X[‘Month’] = date.dt.month

X[‘Day’] = date.dt.day

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

Ss = StandardScaler()

X\_train = ss.fit\_transform(X\_train)

X\_test = ss.fit\_transform(X\_test)

Conclusion:

In the above code, the data are pre-processed involve collecting historical data, cleaning it by handling missing values and duplicates, selecting relevant features, transforming and encoding the data, splitting it into training and testing sets, and loaded it into a suitable structure.