P. SAI DEEKSHITH
1BM18CS148

ML 3rd Program : (3)

Regression Program :-

```
import pandas as pd
import numpy as np
from sklearn.linear_model import LinearRegression
from sklearn.model_selection import train_test_split
df = pd.read_csv("data.csv")
df.head();
```

~~#: Training the data~~

```
~~model = LinearRegression()~~
~~model.fit(df[['weight', 'Age']])~~
```

// Splitting the dataset

```
X_train, X_test, y_train, y_test =
train_test_split(df[['weight','Age']], df['weight'],
                 test_size = 0.2)
```

// Fitting the training Set

```
model = LinearRegression()
model.fit(X_train, y_train)
y_predict = model.predict(X_test)
```

// Plotting the Graph

```
plt.scatter(X_train, y_train, color='yellow')
plt.plot(X_train, regressor.predict(X_train))
plt.title('Height vs Weight')
plt.xlabel('Height')
plt.ylabel('Weight')
```

// Accuracy

```
print("Accuracy = " + model.score(X_test, y_predict)
```

// To predict Weight when height = 5.5 and Age = 38

```
model.predict([[5.5, 38]])
```