

```
import pandas as pd
from sklearn.linear_model import LinearRegression
```

```
from google.colab import files
uploaded = files.upload()
```



Choose Files data.csv

- **data.csv**(text/csv) - 3379 bytes, last modified: 4/18/2024 - 100% done
Saving data.csv to data.csv

```
dataset = pd.read_csv('data.csv')
```

```
print(dataset.shape)
print(dataset.head(5))
```



```
(201, 4)
  hours  age  internet  marks
0   6.83   15         1   78.50
1   6.56   16         0   76.74
2    NaN   17         1   78.68
3   5.67   18         0   71.82
4   8.67   19         1   84.19
```

```
dataset.columns[dataset.isna().any()]
```



```
Index(['hours'], dtype='object')
```

```
dataset.hours = dataset.hours.fillna(dataset.hours.mean())
```

```
X = dataset.iloc[:, :-1].values
print(X.shape)
X
```



```
[ 7.55, 16., 1., 1.],
[ 6.35, 17., 1., 1.],
[ 7.53, 18., 0., 1.],
[ 8.56, 19., 1., 1.],
[ 8.94, 20., 1., 1.],
[ 6.6, 15., 1., 1.],
[ 8.35, 16., 1., 1.],
[ 4.15, 15., 0., 1.]])
```

```
Y = dataset.iloc[:, -1].values
Y
```

```
array([78.5, 76.74, 78.68, 71.82, 84.19, 81.18, 76.99, 85.46, 70.66,
       77.82, 75.37, 83.88, 79.5, 80.76, 83.08, 76.03, 76.04, 85.11,
       82.5, 80.58, 82.18, 83.36, 70.67, 75.02, 70.96, 83.33, 74.75,
       75.65, 74.15, 80.17, 82.27, 76.14, 71.1, 84.35, 83.08, 76.76,
       81.24, 78.21, 73.08, 83.23, 70.27, 86.41, 71.1, 82.84, 82.38,
       72.96, 77.46, 70.11, 72.38, 71.41, 72.22, 77.77, 84.44, 71.45,
       82.21, 85.48, 75.03, 86.65, 70.9, 71.7, 73.61, 79.41, 76.19,
       80.43, 85.78, 70.06, 81.25, 81.7, 69.27, 82.79, 71.8, 71.79,
       74.97, 78.61, 77.59, 72.33, 72.08, 77.33, 70.05, 73.34, 84.,
       82.93, 76.63, 75.36, 77.29, 72.87, 73.4, 81.74, 71.85, 84.6,
       79.56, 82.1, 72.08, 79.1, 81.01, 76.48, 75.39, 68.57, 83.64,
       82.3, 75.18, 82.03, 82.99, 79.26, 77.55, 77.07, 72.1, 73.25,
       74.25, 70.58, 81.08, 75.04, 76.38, 80.86, 78.42, 74.44, 70.34,
       85.04, 73.61, 75.55, 76.2, 82.69, 76.83, 79.53, 83.57, 85.95,
       76.02, 77.65, 77.01, 74.49, 73.19, 71.86, 75.8, 72.46, 78.39,
       83.48, 83.15, 71.22, 85.98, 83.91, 84.58, 80.31, 82.55, 75.52,
       83.82, 85.15, 82.75, 74.34, 82.02, 86.12, 71.87, 76.7, 81.7,
       70.78, 78.45, 70.2, 83.37, 75.52, 81.57, 80.72, 80.81, 79.49,
       79.17, 77.07, 82.04, 71.94, 81.6, 70.79, 82.68, 83.08, 71.18,
       77.63, 77.78, 70.4, 73.02, 71.11, 85.96, 73.64, 84.24, 78.17,
       77.19, 71.83, 86.99, 83.87, 71.5, 79.63, 85.1, 72.01, 77.27,
       79.87, 73.14, 70.51, 84.03, 79.64, 74.24, 81.67, 84.68, 86.75,
       78.05, 83.5, 81.45])
```

```
model = LinearRegression()
model.fit(X,Y)
```

```
LinearRegression()
```

```
a=[[9.2,20,0]]
PredictedmodelResult = model.predict(a)
print(PredictedmodelResult)
```

```
[86.26599847]
```