

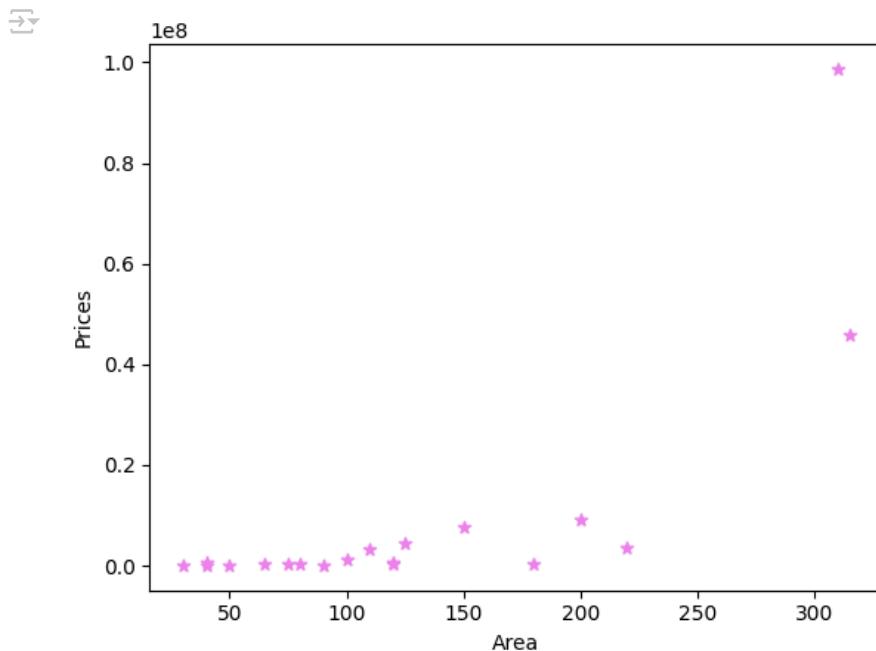
```
import pandas as pd
import matplotlib.pyplot as plt
from sklearn.linear_model import LinearRegression

ds = pd.read_csv('Linearregression.csv')
```

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

```
→ (19, 2)
   Area  Prices
0     40  458000
1    120  674200
2     80  145600
3     75  345600
4     40  12450
```

```
plt.xlabel('Area')
plt.ylabel('Prices')
plt.scatter(ds.Area,ds.Prices,color='violet',marker='*')
plt.show()
```



```
x=ds.drop('Prices',axis='columns')
y=ds.Prices
x
y
```

```
Prices
_____
0    458000
1    674200
2    145600
3    345600
4    12450
5    7534000
6    9075000
7    4538900
8    3245000

model = LinearRegression()
model.fit(x,y)

LinearRegression()
[1] 345600
[2] 2353800
[3] 1120
[4] 400700
[5] 400700
[6] 400700
[7] 400700
[8] 400700
[9] 400700
[10] 400700
[11] 400700
[12] 400700
[13] 400700
[14] 400700
[15] 400700
[16] 400700
[17] 400700
[18] 235380

x = 1120
LandAreaInSqFt=[[x]]
predictedModelResult=model.predict(LandAreaInSqFt)
print(predictedModelResult)

[2] 2.23165279e+08
[13] /usr/local/lib/python3.11/dist-packages/sklearn/utils/validation.py:2739: UserWarning: X does not have valid feature n
      warnings.warn(
[18]     235380

m=model.coef_
print(m)

[2] [215482.54946491]

b=model.intercept_
print(b)

[2] -18175176.30026754

y=m*x+b
print("Price of {0} square feed land is:{1}".format(x,y[0]))

[2] Price of 1120 square feed land is:223165279.1004322
```