

In [ ]:

```
#Consider a House dataset containing the information of area and price. Use Linear Regression model to fit on the dataset. Find the value of R2, intercept, and coef. Also use a dataset containing the information of different ho  
uses of different area for the prediction of prices using the built model.
```

In [14]:

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

In [15]:

```
df=pd.read_csv("C:/Users/Deep/Desktop/dataset.csv")  
df
```

Out[15]:

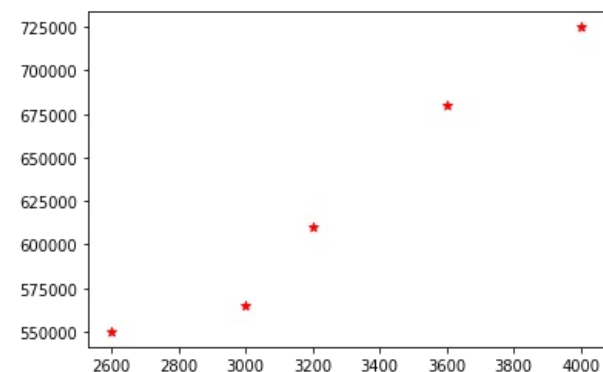
	area	price
0	2600	550000
1	3000	565000
2	3200	610000
3	3600	680000
4	4000	725000

In [16]:

```
plt.scatter(df.area,df.price,color='red',marker='*')
```

Out[16]:

<matplotlib.collections.PathCollection at 0x1e73b7eb208>



In [17]:

```
reg=linear_model.LinearRegression()  
reg.fit(df[['area']],df.price)
```

Out[17]:

LinearRegression(copy\_X=True, fit\_intercept=True, n\_jobs=None, normalize=False)

In [18]:

```
reg.coef_
```

Out[18]:

array([135.78767123])

In [19]:

```
reg.intercept_
```

Out[19]:

180616.43835616432

In [20]:

```
d=pd.read_csv("C:/Users/Deep/Desktop/dataset1.csv")
d
```

Out[20]:

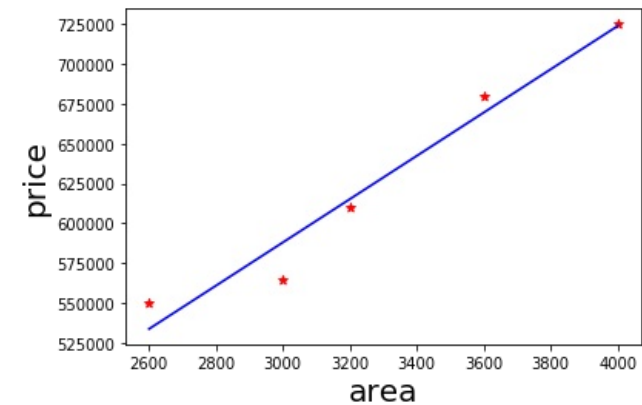
	area
0	2600
1	3000
2	3200
3	3600
4	4000

In [21]:

```
p=reg.predict(d)
p
d['price']=p
#d.to_csv('C:/Users/Deep/Desktop/prediction.csv')
plt.xlabel('area',fontsize=20)
plt.ylabel('price',fontsize=20)
plt.scatter(df.area,df.price,color='red',marker='*')
plt.plot(df.area,reg.predict(df[['area']]),color='blue')
```

Out[21]:

[<matplotlib.lines.Line2D at 0x1e73b9af508>]



In [ ]: