In [1]:
```
import pandas as pd
```

In [2]:
```
import numpy as np
```

In [3]:
```
import matplotlib.pyplot as plt
```

In [4]:
```
from sklearn import linear_model
```

In [5]:
```
df = pd.read_csv('homeprices.csv')
```

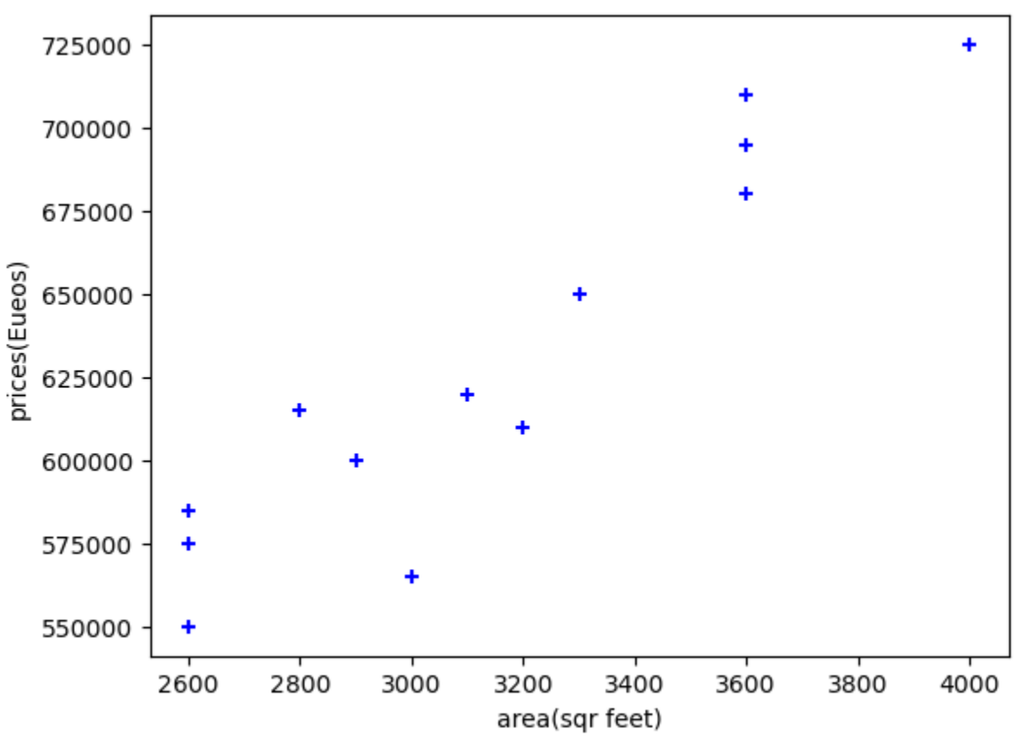
In [6]:
```
df.head()
```

Out[6]:

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

In [8]:
```
%matplotlib inline
```

In [19]:
```
plt.xlabel('area(sqr feet)')
plt.ylabel('prices(Eueos)')
plt.scatter(df.area,df.price,color ='blue',marker='+')
plt.show()
```



In [43]:
```
X = np.array(df['area']).reshape(-1, 1)
y = np.array(df['price']).reshape(-1, 1)
```

In [45]:
```
reg = linear_model.LinearRegression()
reg.fit(X,y)
```

Out[45]:
```
▾ LinearRegression

LinearRegression()
```

In [46]:
```
reg.predict([[3300]])
```

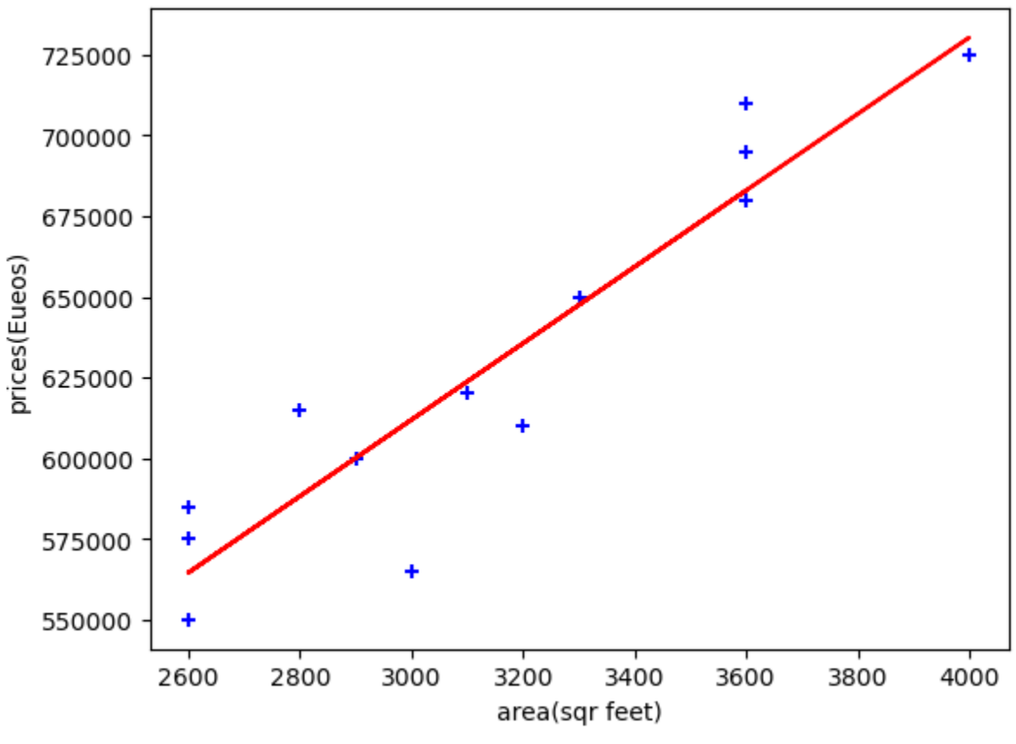
Out[46]:
```
array([[647429.99377722]])
```

In [47]:
```
reg.predict([[5000]])
```

Out[47]:
```
array([[848531.42501556]])
```

In [53]:
```
plt.xlabel('area(sqr feet)')
plt.ylabel('prices(Eueos)')
plt.scatter(df.area,df.price,color ='blue',marker='+')
plt.plot(df.area,reg.predict(df[['area']]),color = 'red')
plt.show()
```

```
C:\Users\ROG\anaconda3\Lib\site-packages\sklearn\base.py:457: UserWarning: X has feature names, but LinearRegression was fitted without feature names
  warnings.warn(
```



In [ ]:

In [ ]: