# **Project 2: Home Price Prediction**

```
In [2]:
import pandas as pd
import matplotlib.pyplot as plt
In [3]:
df=pd.DataFrame({'Area':[100,200,300,400,500,600,700],'Price':[50,100,150,200,250,300,350]}
Out[3]:
   Area
        Price
0
    100
           50
1
    200
          100
2
    300
          150
3
    400
          200
4
    500
          250
5
    600
          300
    700
          350
6
In [4]:
from sklearn import linear_model
In [5]:
reg= linear_model.LinearRegression()
reg.fit(df[['Area']],df.Price)
Out[5]:
LinearRegression()
In [6]:
reg.coef_
Out[6]:
array([0.5])
In [7]:
reg.score(df[['Area']],df.Price)
Out[7]:
```

1.0

```
In [8]:
```

reg.intercept\_

# Out[8]:

-8.526512829121202e-14

# In [9]:

```
reg.predict([[1200]])
```

# Out[9]:

array([600.])

# In [10]:

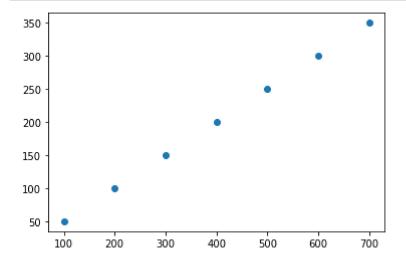
```
reg.predict([[1400]])
```

# Out[10]:

array([700.])

# In [12]:

```
plt.scatter(df['Area'],df['Price'])
plt.show()
```



# In [ ]: