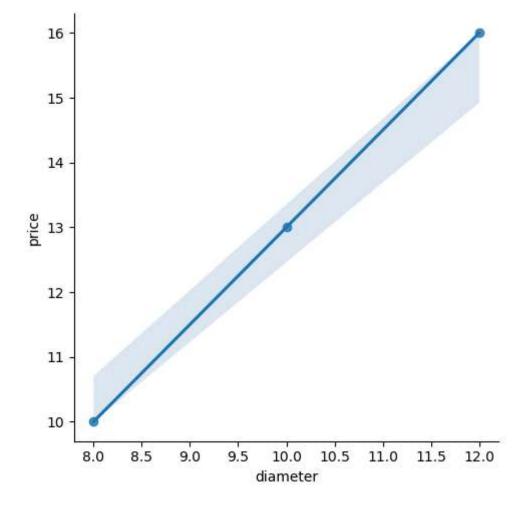
```
In [30]:
         import pandas as pd
In [32]: import seaborn as sns
         from sklearn import linear_model
In [34]: df = pd.read_csv('pizza.csv')
In [36]: df
Out[36]:
             diameter price
         0
                   8
                         10
                  10
                         13
          2
                  12
                         16
```

In [40]: sns.lmplot(x='diameter',y='price',data=df)

Out[40]: <seaborn.axisgrid.FacetGrid at 0x1786544cd70>



In [42]: reg=linear_model.LinearRegression()

2/13/25, 8:34 PM linear_regression1

```
In [54]:
         reg.fit(df[['diameter']],df['price'])
Out[54]:
             LinearRegression 🔍 🔍
         LinearRegression()
In [56]: reg.predict([[20]])
        C:\Users\hp\anaconda3\Lib\site-packages\sklearn\base.py:493: UserWarning: X does not
        have valid feature names, but LinearRegression was fitted with feature names
          warnings.warn(
Out[56]: array([28.])
In [58]:
         reg.predict([[16]])
        C:\Users\hp\anaconda3\Lib\site-packages\sklearn\base.py:493: UserWarning: X does not
        have valid feature names, but LinearRegression was fitted with feature names
          warnings.warn(
Out[58]: array([22.])
In [60]:
         reg.coef_
Out[60]: array([1.5])
In [62]:
         reg.intercept_
Out[62]: -1.99999999999982
 In [ ]:
```