```
import numpy as np
import pandas as pd
```

```
data={'Centigrade':[25,30,33,35,37,40],'Farhenheit':[77,86,91.4,95.0,98.6,104.0]}
data
```

```
{'Centigrade': [25, 30, 33, 35, 37, 40],
 'Farhenheit': [77, 86, 91.4, 95.0, 98.6, 104.0]}
```

```
df=pd.DataFrame(data)
```

```
df
```

	Centigrade	Farhenheit
0	25	77.0
1	30	86.0
2	33	91.4
3	35	95.0
4	37	98.6
5	40	104.0

```
df.columns
```

```
Index(['Centigrade', 'Farhenheit'], dtype='object')
```

```
X = df[['Centigrade']]
X
```

	Centigrade
0	25
1	30
2	33
3	35
4	37
5	40

```
y=df[['Farhenheit']]
y
```

	Farhenheit
0	77.0
1	86.0
2	91.4
3	95.0
4	98.6

```
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_sta
```

```
X_train
```

	Centigrade
4	37
2	33
1	30
3	35

```
y_train
```

	Farhenheit
4	98.6
2	91.4
1	86.0
3	95.0

```
from sklearn.linear_model import LinearRegression
lm=LinearRegression()
```

```
lm.fit(X_train,y_train)
```

```
LinearRegression(copy_X=True, fit_intercept=True, n_jobs=None, normalize=False
```

```
prediction=lm.predict([[48]])
prediction
```

```
array([[118.4]])
```