In [29]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

In [2]:

```
data=pd.read_csv("D:\Downloads\dataframe_.csv")
```

In [3]:

```
data
```

Out[3]:

	input	output
0	-122.740667	-130.572085
1	-121.531419	-129.938929
2	-134.917019	-130.141832
3	-120.605951	-125.760932
4	-129.894781	-112.785214
...	...	...
1692	25.410184	-76.380902
1693	29.537304	-82.796934
1694	31.633331	-87.000000
1695	29.091458	-104.943052
1696	17.145296	-101.726894

1697 rows × 2 columns

In [5]:

```
data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1697 entries, 0 to 1696
Data columns (total 2 columns):
 #   Column  Non-Null Count  Dtype  
---  ------  --------------  -----  
 0   input   1696 non-null   float64
 1   output  1696 non-null   float64
dtypes: float64(2)
memory usage: 26.6 KB
```

In [6]:

```
data.isnull().sum()
```

Out[6]:

```
input     1
output    1
dtype: int64
```

In [8]:

```
data.dropna(inplace=True)
```

In [9]:

```
data
```

Out[9]:

	input	output
0	-122.740667	-130.572085
1	-121.531419	-129.938929
2	-134.917019	-130.141832
3	-120.605951	-125.760932
4	-129.894781	-112.785214
...	...	...
1692	25.410184	-76.380902
1693	29.537304	-82.796934
1694	31.633331	-87.000000
1695	29.091458	-104.943052
1696	17.145296	-101.726894

1696 rows × 2 columns

In [10]:

```
x=data['input']
```

In [11]:

```
y=data['output']
```

In [12]:

```
x
```

Out[12]:

```
0      -122.740667
1      -121.531419
2      -134.917019
3      -120.605951
4      -129.894781
           ...
1692     25.410184
1693     29.537304
1694     31.633331
1695     29.091458
1696     17.145296
Name: input, Length: 1696, dtype: float64
```

In [13]:

```
y
```

Out[13]:

```
0      -130.572085
1      -129.938929
2      -130.141832
3      -125.760932
4      -112.785214
           ...
1692    -76.380902
1693    -82.796934
1694    -87.000000
1695   -104.943052
1696   -101.726894
Name: output, Length: 1696, dtype: float64
```

In [14]:

```
from sklearn.model_selection import train_test_split
```

In [15]:

```
meanx=np.mean(x)
meanx
```

Out[15]:

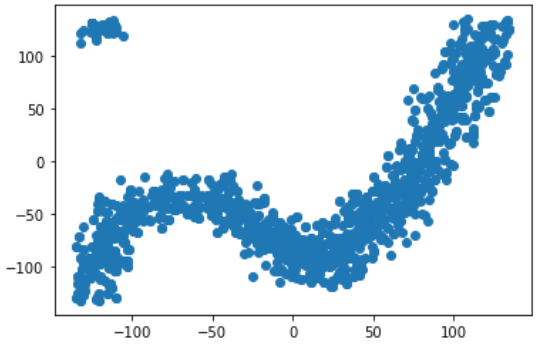
```
1.1599326450064844
```

In [20]:

```
plt.scatter(x,y)
```

Out[20]:

```
<matplotlib.collections.PathCollection at 0x231ebc96fa0>
```



In [21]:

```
from sklearn.linear_model import LinearRegression
```

In [26]:

```
y.values.reshape(-1,1)
```

Out[26]:

```
array([[-130.5720846],
       [-129.9389289],
       [-130.1418321],
       ...,
       [ -87.       ],
       [-104.9430524],
       [-101.7268941]])
```

In [ ]:

```

```