In [6]:
```
import pandas as pd

df = pd.read_csv("C:\\Users\\Atwongire Vianney\\Desktop\\AI_PRAC\\Walmart_sales
df.head()
```

Out[6]:

	Store	Date	Weekly_Sales	Holiday_Flag	Temperature	Fuel_Price	CPI	Unemployment
0	1	05-02-2010	1643690.90	0	42.31	2.572	211.096358	8.106
1	1	12-02-2010	1641957.44	1	38.51	2.548	211.242170	8.106
2	1	19-02-2010	1611968.17	0	39.93	2.514	211.289143	8.106
3	1	26-02-2010	1409727.59	0	46.63	2.561	211.319643	8.106
4	1	05-03-2010	1554806.68	0	46.50	2.625	211.350143	8.106

In [7]:
```
df.tail()
df
```

Out[7]:

	Store	Date	Weekly_Sales	Holiday_Flag	Temperature	Fuel_Price	CPI	Unemploym
0	1	05-02-2010	1643690.90	0	42.31	2.572	211.096358	8.1
1	1	12-02-2010	1641957.44	1	38.51	2.548	211.242170	8.1
2	1	19-02-2010	1611968.17	0	39.93	2.514	211.289143	8.1
3	1	26-02-2010	1409727.59	0	46.63	2.561	211.319643	8.1
4	1	05-03-2010	1554806.68	0	46.50	2.625	211.350143	8.1
...	...	...	...	...	...	...	...	
6430	45	28-09-2012	713173.95	0	64.88	3.997	192.013558	8.6
6431	45	05-10-2012	733455.07	0	64.89	3.985	192.170412	8.6
6432	45	12-10-2012	734464.36	0	54.47	4.000	192.327265	8.6
6433	45	19-10-2012	718125.53	0	56.47	3.969	192.330854	8.6
6434	45	26-10-2012	760281.43	0	58.85	3.882	192.308899	8.6

6435 rows × 8 columns

In [9]:
```
Weekly_Sales_df = df['Weekly_Sales']
```

In [27]:
```
Weekly_Sales_df
```

Out[27]:
```
0       1643690.90
1       1641957.44
2       1611968.17
3       1409727.59
4       1554806.68
           ...
6430     713173.95
6431     733455.07
6432     734464.36
6433     718125.53
6434     760281.43
Name: Weekly_Sales, Length: 6435, dtype: float64
```

In [28]:
```
Fuel_Price_df = df['Fuel_Price']
Fuel_Price_df
```

Out[28]:
```
0       2.572
1       2.548
2       2.514
3       2.561
4       2.625
        ...
6430    3.997
6431    3.985
6432    4.000
6433    3.969
6434    3.882
Name: Fuel_Price, Length: 6435, dtype: float64
```

In [35]:
```

Weekly_Sales_df.tolist()
Weekly_Sales_list
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[35], line 1
----> 1 Weekly_sales_df
      2 Weekly_Sales_df.tolist()
      3 Weekly_Sales_list

NameError: name 'Weekly_sales_df' is not defined
```

In [23]:
```
Fuel_Price_df.tolist()
Fuel_Price_list
```

Out[23]:
```
[2.572,
 2.548,
 2.514,
 2.561,
 2.625,
 2.667,
 2.72,
 2.732,
 2.719,
 2.77,
 2.808,
 2.795,
 2.78,
 2.835,
 2.854,
 2.826,
 2.759,
 2.705,
 2.668,
```

In [30]:
```
def line_of_best_fit(xs,ys):
    slope = (((mean(xs)*mean(ys)) - mean(xs*ys))/(mean(xs)*mean(xs) - mean(xs*x
    y_intercept = mean(ys) - slope*mean(xs)
    return slope, y_intercept
```

In [31]:
```
import numpy as np
```

In [36]:
```
Weekly_sales_df
xs = np.array(Weekly_Sales_list, dtype = np.float64)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[36], line 1
----> 1 Weekly_sales_df
      2 xs = np.array(Weekly_Sales_list, dtype = np.float64)

NameError: name 'Weekly_sales_df' is not defined
```

In [ ]:

In [ ]: