In [2]:

```
#Data
revenue = [14574.49, 7606.46, 8611.41, 9175.41, 8058.65, 8105.44, 11496.28, 9766.09, 10305.32, 14379.96, 10713.97
expenses = [12051.82, 5695.07, 12319.20, 12089.72, 8658.57, 840.20, 3285.73, 5821.12, 6976.93, 16618.61, 10054.37
```

In [3]:

```
profit = [revenue[i] - expenses[i] for i in range(len(revenue))]

print(profit)
```

```
[2522.67, 1911.3900000000003, -3707.790000000001, -2914.3099999999995, -599.9200000000001, 7265.24, 821
0.550000000001, 3944.9700000000003, 3328.3899999999994, -2238.6500000000015, 659.5999999999985, 11629.5
4]
```

In [6]:

```
profit = [2522.67, 1911.39, -3707.79, -2914.31, -599.92, 7265.24, 8210.55, 3944.97, 3328.39, -2238.65, 659.60, 11
tax_rate = 0.30

tax = [p * tax_rate for p in profit]

print(tax)
```

```
[756.801, 573.417, -1112.337, -874.293, -179.97599999999997, 2179.5719999999997, 2463.1649999999995, 118
3.491, 998.5169999999999, -671.595, 197.88, 3488.862]
```

In [8]:

```
profit_aftertax=[profit[i] - tax[i] for i in range(len(profit))]
profit_aftertax
```

Out[8]:

```
[1765.8690000000001,
 1337.973,
 -2595.453,
 -2040.0169999999998,
 -419.94399999999996,
 5085.668,
 5747.385,
 2761.479,
 2329.873,
 -1567.055,
 461.72,
 8140.678000000001]
```

In [9]:

```
profit_margin=[profit_aftertax[i] / revenue[i] for i in range(len(profit_aftertax))]
profit_margin
```

Out[9]:

```
[0.1211616324138958,
 0.17589956431769838,
 -0.30139698376920854,
 -0.22233524169492153,
 -0.05211096151340485,
 0.6274388558795081,
 0.49993432658216397,
 0.2827619856052934,
 0.22608448840016615,
 -0.10897492065346497,
 0.043095136536689956,
 0.5274680403019406]
```

In [20]:

```
profit_margin_percentage = [round(profit_margin * 100, 2) for profit_margin in profit_margin]
profit_margin_percentage

```

Out[20]:

```
[12.12,
 17.59,
 -30.14,
 -22.23,
 -5.21,
 62.74,
 49.99,
 28.28,
 22.61,
 -10.9,
 4.31,
 52.75]
```

In [23]:

```
mean_profit_after_tax = sum(profit_aftertax) / len(profit_aftertax)
mean_profit_after_tax
```

Out[23]:

```
1750.6813333333332
```

In [26]:

```
max_profit_after_tax = max(profit_aftertax)
max_profit_after_tax
```

Out[26]:

```
8140.678000000001
```

In [31]:

```
good_month = [profit_aftertax > mean_profit_after_tax for profit_aftertax in profit_aftertax]

good_month
```

Out[31]:

```
[True, False, False, False, False, True, True, True, True, False, False, True]
```

In [33]:

```
Worse_month = [profit_aftertax < mean_profit_after_tax for profit_aftertax in profit_aftertax]
Worse_month
```

Out[33]:

```
[False, True, True, True, True, False, False, False, False, True, True, False]
```

In [38]:

```
months = ['January', 'February', 'March', 'April', 'May', 'June', 'July', 'August', 'September', 'October', 'Nove
best_month = [month for month, profit in zip(months, profit_aftertax) if profit == max(profit_aftertax)]

best_month
```

Out[38]:

```
['December']
```

In [39]:

```
revenue_thousand = [amount / 1000 for amount in revenue]

print(revenue_thousand)
```

```
[14.574489999999999, 7.60646, 8.61141, 9.17541, 8.05865, 8.10544, 11.49628, 9.76609, 10.30532, 14.379959
999999999, 10.71397, 15.4335]
```

In [45]:

```
rounded_revenue = [round(i, 2) for i in revenue_thousand]

print(rounded_revenue)
```

```
[14.57, 7.61, 8.61, 9.18, 8.06, 8.11, 11.5, 9.77, 10.31, 14.38, 10.71, 15.43]
```

In [40]:

```
profit_thousand=[amount / 1000 for amount in profit]
profit_thousand
```

Out[40]:

```
[2.52267,
 1.9113900000000001,
 -3.70779,
 -2.91431,
 -0.59992,
 7.2652399999999995,
 8.21055,
 3.9449699999999996,
 3.3283899999999997,
 -2.2386500000000003,
 0.6596000000000001,
 11.62954]
```

In [43]:

```
rounded_profit = [round(profit, 2) for profit in profit_thousand]

print(rounded_profit)
```

```
[2.52, 1.91, -3.71, -2.91, -0.6, 7.27, 8.21, 3.94, 3.33, -2.24, 0.66, 11.63]
```

In [41]:

```
expenses_thousand=[amount / 1000 for amount in expenses]
expenses_thousand
```

Out[41]:

```
[12.05182,
 5.695069999999999,
 12.3192,
 12.08972,
 8.65857,
 0.8402000000000001,
 3.28573,
 5.82112,
 6.97693,
 16.61861,
 10.05437,
 3.80396]
```

In [46]:

```
rounded_expenses = [round(i, 2) for i in expenses_thousand]

print(rounded_expenses)
```

```
[12.05, 5.7, 12.32, 12.09, 8.66, 0.84, 3.29, 5.82, 6.98, 16.62, 10.05, 3.8]
```

In [42]:

```
profit_margin_thousand=[amount / 1000 for amount in profit_margin]
profit_margin_thousand
```

Out[42]:

```
[0.0001211616324138958,
 0.00017589956431769837,
 -0.00030139698376920856,
 -0.00022233524169492153,
 -5.211096151340485e-05,
 0.0006274388558795081,
 0.0004999343265821639,
 0.0002827619856052934,
 0.00022608448840016616,
 -0.0001089749206534649 7,
 4.3095136536689954e-05,
 0.0005274680403019406]
```

In [47]:

```
rounded_profit_margin = [round(i, 2) for i in profit_margin_thousand]

print(rounded_profit_margin)
```

```
[0.0, 0.0, -0.0, -0.0, -0.0, 0.0, 0.0, 0.0, 0.0, -0.0, 0.0, 0.0]
```

In [ ]:

```
1
```