In [90]:
```
import pandas as pd
from pathlib import Path

#file to upload
budget_path = Path("/Users/staciesauer/GitHub/Python-Challenge/PyBank/

#read csv and add data to dataframe
budget_df = pd.read_csv(budget_path,encoding="utf-8")

budget_df.head()
```

Out[90]:

	Date	Profit/Losses
0	Jan-10	1088983
1	Feb-10	-354534
2	Mar-10	276622
3	Apr-10	-728133
4	May-10	852993

In [91]:
```
# Calculate the number of unique authors in the DataFrame
date_count = len(budget_df["Date"].unique())

# Print the number of unique dates.
print(date_count)
```

```
86
```

In [92]:
```
print("____________________________________________________")
```

```
____________________________________________________
```

In [93]:
```
#The net total amount of "Profit/Losses" over the entire period
net_total = sum(budget_df["Profit/Losses"])

#print the total amount of profit and loss
print(net_total)
```

```
22564198
```

In [94]:
```
print("____________________________________________________")
```

```
____________________________________________________
```

In [95]:
```
# The changes in "Profit/Losses" over the entire period, and then the
profit_loss_df = budget_df["Profit/Losses"]- budget_df["Profit/Losses"

average_change = profit_loss_df.mean()

#print the average of the changes
print(average_change)
```

```
-8311.105882352942
```

In [99]:
```
print("____________________________________________________")
```

```
____________________________________________________
```

In [132]:
```
#The greatest increase in profits (date and amount) over the entire pe
greatest_increase = profit_loss_df.max()
row = profit_loss_df == profit_loss_df.max()

date_increase = budget_df.loc[row,"Date"].values[0]

#print the greatest increase in profits
print(greatest_increase)
print(date_increase)
```

```
1862002.0
Aug-16
```

In [133]:
```
#The greatest decrease in profits (date and amount) over the entire pe

greatest_decrease = profit_loss_df.min()
row = profit_loss_df == profit_loss_df.min()

date_decrease = budget_df.loc[row,"Date"].values[0]

#print the greatest increase in profits
print(greatest_decrease)
print(date_decrease)
```

```
-1825558.0
Feb-14
```

In [135]:
```
#output to text file
Result = [date_count,net_total,average_change,greatest_increase,date_i
result_df = pd.DataFrame(Result)

output_file = "/Users/staciesauer/GitHub/Python-Challenge/PyBank/Analy
result_df.to_csv(output_file)

print("Financial Analysis")
print("____________________________")
print("Total Months :", date_count)
print("Total: $" ,net_total)
print("Average Change: $" ,average_change)
print("Greatest Increase in Profits:" ,greatest_increase, date_increas
print("Greatest Decrease in Profits:" ,greatest_decrease, date_decreas
```

```
Financial Analysis
____________________________
Total Months : 86
Total: $ 22564198
Average Change: $ -8311.105882352942
Greatest Increase in Profits: 1862002.0 Aug-16
Greatest Decrease in Profits: -1825558.0 Feb-14
```

In [ ]: