Module 3 Challenge codes

import pandas as pd

import numpy as np

df\_election = pd.read\_csv(r"C:\Users\karki\Downloads\Starter\_Code (4)\Starter\_Code\PyPoll\Resources\election\_data.csv")

display(df\_election)

df\_election\_list = df\_election['Candidate'].unique()

df\_election\_list

df\_election\_total =len(df\_election.value\_counts())

df\_election\_total

df\_total\_votes = df\_election['Candidate'].value\_counts()

df\_total\_votes

df\_election['Candidate'].value\_counts(normalize=True)

df\_percent = df\_election['Candidate'].value\_counts(normalize=True).mul(100).round(3).astype(str) + '%'

df\_percent

print('Election Results')

print('----------------------------------')

print('Total Votes:')

print(df\_election\_total)

print('----------------------------------')

print(df\_percent)

print('----------------------------------')

print('Winner : Diana DeGette with 73.812% vote')

print('----------------------------------')

fig: Executable code for exercise 2

import pandas as pd

df\_Budget = pd.read\_csv(r"C:\Users\karki\Downloads\Starter\_Code (4)\Starter\_Code\PyBank\Resources\budget\_data.csv")

df\_Budget.head()

df\_total\_months = len(df\_Budget['Date'].value\_counts())

df\_total\_months

df\_Total = df\_Budget['Profit/Losses'].sum()

df\_Total

df\_mean = df\_Budget['Profit/Losses'].mean()

df\_mean.round(decimals=2)

min\_least = df\_Budget['Profit/Losses'].idxmin()

df\_min = df\_Budget.iloc[min\_least]

df\_min

max\_index = df\_Budget['Profit/Losses'].idxmax()

df\_max = df\_Budget.iloc[max\_index]

df\_max

print('Financial analysis')

print('----------------------------------')

print('Total Months :')

print(df\_total\_months)

print("Total Profit/Losses:")

print(df\_Total)

print('Average Change: ')

print(df\_mean.round(decimals=2))

print('Greatest Increase in Profits:')

print(df\_max)

print('---------------------------')

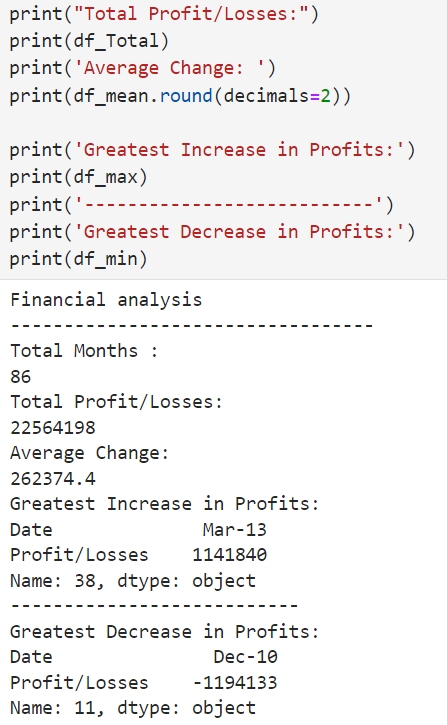
print('Greatest Decrease in Profits:')

print(df\_min)

Fig : Executable code for exercise 1

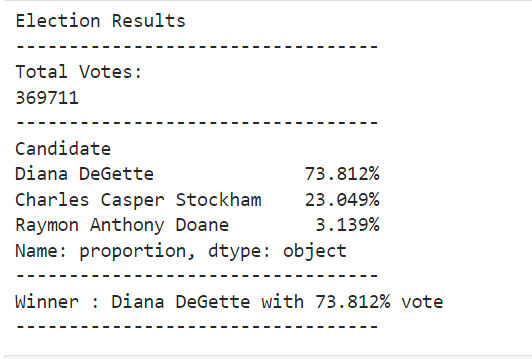
The screenshots for the answers to both challenges are pasted below:

Challenge 1 payroll



* In this exercise I have utilized various codes and functions to get the requested results.

Challenge 2 Election



* In this exercise I have utilized various codes and functions to get the requested results.