import matplotlib.pyplot as plt

my\_file = open("/Users/aidanplatkin/numbers.txt", "r")

content = my\_file.read()

print(content)

content\_list = content.split(",")

my\_file.close()

#print(content\_list)

content\_list = [int(x) for x in content\_list]

content\_list.sort()

#print(content\_list)

freq = {}

for item in content\_list:

if (item in freq):

freq[item] += 1

else:

freq[item] = 1

for k, v in freq.items(): print(k, v)

x = content\_list

plt.hist(x)

plt.title("Frequency",)

plt.show()

import json

y=json.dumps(freq)

print(y)

new = open("/Users/aidanplatkin/testjson.json", "x")

new.write(y)

new.close()

import pandas as pd

df=pd.read\_csv('/Users/aidanplatkin/amazon-orders.csv')

print(df)

df = df.fillna(0)

df.head()

df['Order Date'] = pd.to\_datetime(df['Order Date'])

df.head()

del df["Website"]

del df["Purchase Order Number"]

del df["Ordering Customer Email"]

del df["Shipment Date"]

del df["Shipping Address Name"]

df.drop(['Shipping Address Street 1'], axis = 1)

df.drop(["Shipping Address Street 1", "Shipping Address Street 2", "Order Status", "Carrier Name & Tracking Number", "Subtotal", "Shipping Charge", "Tax Before Promotions"], axis =1)

df.drop(["Shipping Address Street 1", "Shipping Address Street 2",

"Order Status", "Carrier Name & Tracking Number", "Subtotal",

"Shipping Charge", "Tax Before Promotions", "Total Promotions",

"Tax Charged", "Buyer Name", "Group Name",

"Shipping Address City", "Shipping Address State",

"Shipping Address Zip"], axis=1)

Monthlysum=df.groupby(pd.Grouper(key='Order Date', axis=0,

print(Monthlysum)

Monthlymean=df.groupby(pd.Grouper(key='Order Date', axis=0,

freq='M')).mean()

print(Monthlymean)

df["Total Charged"].sum()

df["Total Charged"].mean()

df["Total Charged"].max()

df["Total Charged"].min()

df["Total Charged"].std()

df["Total Charged"].median()

Monthlysum.groupby(['Order Date']).sum().plot(kind='pie', y='Total Charged', title= "Percentage of Total Spending by Month", autopct='%1.0f%%').legend(loc='center left',bbox\_to\_anchor=(1.0, 0.5));

Monthlymean.groupby(['Order Date']).sum().plot(kind='bar',y='Total Charged', title='Average Spent per Month').legend(loc='center left',bbox\_to\_anchor=(1.0, 0.5));