# A project to analyse the Expenses

import csv

import os

import pandas as pd

import matplotlib.pyplot as plt

import numpy as np

x="y"

def create\_csv(filename, headers, rows):

try:

f=open("Expenses.csv")

f.close()

except:

with open(filename,mode='w',newline='') as file:

writer=csv.writer(file)

writer.writerow(headers) # Write the headers

writer.writerows(rows) # Write the rows

print(f"CSV file '{filename}' created successfully.")

filename = "Expenses.csv"

headers = ["Category", "Amount", "Date"]

rows=[]

pd

create\_csv(filename, headers,rows) # function call

print("MENU\n1.Enter an expense\n2.Analyse the data\n3.Visualize the data\n4.Exit")

# Function to add expense

def addExpense():

cat=input("Enter the category: ")

amount=input("Enter the amount: ")

date=input("Enetr the date: ")

expense = np.array([[cat, amount, date]], dtype = object)

df = pd.DataFrame(expense, columns=["Category", "Amount", "Date"]) # Convert NumPy array to Pandas DataFrame

df.to\_csv(filename, mode='a', header=not os.path.exists(filename), index=False) # Append data to the CSV file

# Function to analyse data

def analyseData():

df=pd.read\_csv("Expenses.csv")

print(df# A project to analyse the Expenses

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# Function to visualise data

def visualizeData():

df=pd.read\_csv("Expenses.csv")

print("Enter 1 - Category vs Amount and 2 - Date vs Amount...")

a=int(input("Enter your choice: "))

if a==1:

x = df.groupby("Category")["Amount"].sum()

plt.bar(x.index,x.values)

plt.show()

elif a==2:

y = df.groupby("Date")["Amount"].sum()

plt.bar(y.index,y.values)

plt.show()

while x=="y":

choice=int(input("Enter your choice form the Menu: "))

if choice==1:

addExpense()

elif choice==2:

analyseData()

elif choice==3:

visualizeData()

else:

break

x=input("Do you want to continue? (Y/N) :")