In [1]:
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#Description: A simple expense tracker
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In [2]:
```
#Import the libraries
import numpy as np
import pandas as pd
from datetime import datetime
```

In [3]:
```
#Create Empty lists
GOOD_OR_SERVICES=[]
PRICES=[]
DATES=[]
EXPENSE_TYPES=[]
```

In [4]:
```
#Create a function to add the expenses to the lists and organize the data
def add_expenses(good_or_sevices,price,dates,expense_type):
    GOOD_OR_SERVICES.append(good_or_services)
    PRICES.append(price)
    DATES.append(dates)
    EXPENSE_TYPES.append(expense_type)
```

In [6]:
```
#Main program

option=-1 #This will be the user option or choice or input
while(option != 0):
    #create the option menu
    print('Welcome to the simple Expense tracker:')
    print('1. Add Food Expense')
    print('2. Add Household Expense')
    print('3. Add Transportation Expense')
    print('4. Show and Save The Expense Report')
    print('0. Exit')
    option=int(input('Choose an option:\n'))

    #print a new line
    print()
    #check for the  users choice or option or input
    if option == 0:
        print('Exiting the program')
        break
    elif option == 1:
        print('Adding food')
        expense_type='FOOD'
    elif option ==2:
        print('Adding Household')
        expense_type='HOUSEHOLD'
    elif option ==3:
        print('Adding Transportation')
        expense_type='TRANSPORTATION'
    elif option ==4:
        #CReate a dataframe and add the expenses
        expense_report=pd.DataFrame()
        expense_report['GOOD_OR_SERVICES']=GOOD_OR_SERVICES
        expense_report['PRICES']=PRICES
        expense_report['DATES']=DATES
        expense_report['EXPENSE_TYPES']=EXPENSE_TYPES
        #Save the expense report
        expense_report.to_csv('expenses.csv')
        print(expense_report)
    else:
        print('You chose an incorrect option.Please choose 0,1,2,3,4')

    #Allow user to write good or services and price
    if option == 1 or option == 2 or option == 3:
        good_or_services=input('Enter the good or service for the expense type.'+expense_type+':\n')
        price=float(input('Enter the price of the good or service:\n'))
        today_date=datetime.today()
        add_expenses(good_or_services,price,today_date,expense_type)

    #print a new line
    print()
```

```
Welcome to the simple Expense tracker:
1. Add Food Expense
2. Add Household Expense
3. Add Transportation Expense
4. Show and Save The Expense Report
0. Exit
Choose an option:
1

Adding food
Enter the good or service for the expense type.FOOD:
Apple
Enter the price of the good or service:
140

Welcome to the simple Expense tracker:
1. Add Food Expense
2. Add Household Expense
3. Add Transportation Expense
4. Show and Save The Expense Report
0. Exit
Choose an option:
2

Adding Household
Enter the good or service for the expense type.HOUSEHOLD:
Rent
Enter the price of the good or service:
10000

Welcome to the simple Expense tracker:
1. Add Food Expense
2. Add Household Expense
3. Add Transportation Expense
4. Show and Save The Expense Report
0. Exit
Choose an option:
3

Adding Transportation
Enter the good or service for the expense type.TRANSPORTATION:
Gas
Enter the price of the good or service:
1200

Welcome to the simple Expense tracker:
1. Add Food Expense
2. Add Household Expense
3. Add Transportation Expense
4. Show and Save The Expense Report
0. Exit
Choose an option:
4

  GOOD_OR_SERVICES   PRICES                      DATES   EXPENSE_TYPES
0            Apple    140.0 2023-12-03 07:21:22.749020            FOOD
1             Rent  10000.0 2023-12-03 07:22:08.713725       HOUSEHOLD
2              Gas   1200.0 2023-12-03 07:22:28.443714  TRANSPORTATION
3            Apple    140.0 2023-12-03 07:23:20.522684            FOOD
4             Rent  10000.0 2023-12-03 07:23:27.955639       HOUSEHOLD
5              Gas   1200.0 2023-12-03 07:23:38.674913  TRANSPORTATION

Welcome to the simple Expense tracker:
1. Add Food Expense
2. Add Household Expense
3. Add Transportation Expense
4. Show and Save The Expense Report
0. Exit
Choose an option:
0

Exiting the program
```

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