```
import csv
from datetime import datetime
expenses=[]
monthly budget=0
def add expense():
    date=input("Enter the date of the expense (YYYY-MM-DD): ")
    category=input("Enter the category of the expense: ")
    amount=input("Enter the amount spent:")
    description=input("Enter a brief description of the expense: ")
    try:
        amount=float(amount)
        datetime.strptime(date, '%Y-%m-%d')
        expense={
            'date': date,
            'category': category,
            'amount': amount,
            'description': description
        }
        expenses.append(expense)
        print("Expense added successfully")
    except ValueError:
        print("Invalid input! Please ensure the amount is a number and
the date is in the expected format (YYYY-MM-DD)")
def view expense():
    global expenses
    if not expenses:
        print("No expenses recorded.")
        return
    print("\nSaved Expenses:")
    for expense in expenses:
        if all(key in expense for key in ['date', 'category',
'amount', 'description']):
            print(f"Date: {expense['date']}, Category:
{expense['category']}, Amount: ${expense['amount']:.2f}, Description:
{expense['description']}")
        else:
            print("Incomplete expense entry found. Skipping the
entry")
def set budget():
    global monthly budget
    budget input=input("Enter your monthly budget: ")
    try:
        monthly budget=float(budget input)
        print(f"Monthly budget set to {monthly budget:.2f}")
    except ValueError:
        print("Invalid input! Please enter a valid number.")
```

```
def track budget():
    total expenses=sum(expense['amount'] for expense in expenses)
    print(f"Total Expenses: {total expenses:.2f}")
    if total expenses>monthly budget:
        print("You have exceeded your budget")
    else:
        balance remaining=monthly budget-total expenses
        print(f"You have {balance remaining:.2f} left for this
month.")
def save expenses():
    with open('Expenses.csv', mode='w', newline='') as file:
writer=csv.DictWriter(file, fieldnames=['date','category','amount','des
cription'])
        writer.writeheader()
        for expense in expenses:
            writer.writerow(expense)
    print("Expenses saved to Expenses.csv.")
def load expenses():
    global expenses
    try:
        with open('Expenses.csv', mode='r') as file:
            reader=csv.DictReader(file)
            expenses=[row for row in reader]
        for expense in expenses:
            expense['amount']=float(expense['amount'])
        print("Expenses loaded from Expense.csv.")
    except FileNotFoundError:
        print("No previous expenses found. Starting fresh.")
    except Exception as e:
        print(f"Error loading expenses: {e}")
def display menu():
    print("\nMenu:\n1. Add expense\n2. View expenses\n3. Track budget\
n4. Save expenses\n5. Exit")
def main():
    load expenses();
    while True:
        display menu();
        choice=input("Select an option (1-5): ")
        if choice=='1':
            add expense()
        elif choice=='2':
            view expense()
        elif choice=='3':
```

```
set budget()
            track budget()
        elif choice=='4':
            save expenses()
        elif choice=='5':
            save expenses()
            print("Exiting the program")
            break:
        else:
            print("Invalid choice. Please select a valid option.")
if name ==" main ":
    main()
Expenses loaded from Expense.csv.
Menu:
1. Add expense
2. View expenses
3. Track budget
4. Save expenses
5. Exit
Select an option (1-5): 1
Enter the date of the expense (YYYY-MM-DD): 2002-08-09
Enter the category of the expense: Food
Enter the amount spent: 4500
Enter a brief description of the expense: Birthday Party
Expense added successfully
Menu:
1. Add expense
2. View expenses
3. Track budget
4. Save expenses
Exit
Select an option (1-5): 4
Expenses saved to Expenses.csv.
Menu:
1. Add expense
2. View expenses
3. Track budget
4. Save expenses
5. Exit
Select an option (1-5): 2
```

Saved Expenses:

Date: 2005-09-08, Category: Food, Amount: \$3400.00, Description:

Dinner with friends

Date: 2004-09-05, Category: Travel, Amount: \$500.00, Description: Road

trip with friends

Date: 2002-08-09, Category: Food, Amount: \$4500.00, Description:

Birthday Party

Menu:

- 1. Add expense
- 2. View expenses
- Track budget
- 4. Save expenses
- 5. Exit

Select an option (1-5): 3

Enter your monthly budget: 9000

Monthly budget set to 9000.00

Total Expenses: 8400.00

You have 600.00 left for this month.

Menu:

- 1. Add expense
- 2. View expenses
- 3. Track budget
- 4. Save expenses
- 5. Exit

Select an option (1-5): 5

Expenses saved to Expenses.csv.

Exiting the program