```
expenses = []
next id = 1
def add_Expense(date, amount, category, description):
    global next_id
   expense = {
        'id' : next_id,
        'date' : date,
        'amount' : amount,
        'category' : category,
        'description' : description
   expenses.append(expense)
   next_id += 1
   print("Expense added successfully!")
def view_expenses():
    if not expenses:
        print("No expense recorded.")
   filter_choice = input("Do you want to filter by (1) Date or (2) Category? (Enter '1', '2' or '0' for none):")
   if filter_choice == '1':
        filter_date = input('Enter the date to filter (YYYY-MM-DD):')
        filtered_expenses = [expense for expense in expenses if expenses ['date'] == filter_date]
    elif filter_choice == '2':
        filter_category = input('Enter the category to filter:')
        filtered_expenses = [expense for expense in expenses if expense['category'].lower() == filter_category.lower()]
   else:
        filtered_expenses = expenses
   if not filtered_expenses:
        print("No expenses found for the given filter.")
   for expense in filtered_expenses:
        print(f"ID : {expense['id']}, Date : {expense['date']}, Amount : {expense['amount']}, Category : {expense['category']}, Description :
def delete_expense(expense_id):
   index = 0
   for i in expenses:
        if i['id'] == expense_id:
            expenses.pop(index)
            print("Expense deleted successfully!")
           return
        index += 1
   print("Given expense id is not present.")
def generate_summary():
   summary = \{\}
   for expense in expenses:
        category = expense['category']
        summary[category] = summary.get(category,0) + expense['amount']
    for category,amount in summary.items():
        print(f"Category: {category}, Total Amount: {amount}.")
def save_expenses_to_file(filename):
   with open(filename, 'w') as file:
        for expense in expenses:
            file.write(f"{expense['id']}, {expense['date']}, {expense['amount']}, {expense['category']}, {expense['description']}\n")
        print("Expenses saved to file.")
def load_expenses_from_file(filename):
   global next_id
   id = 0
   with open(filename, 'r') as file:
            for line in file:
                id, date, amount, category, description = line.strip().split(',')
```

```
expenses.append({
                'id' : int(id),
                'date' : date,
                'amount' : float(amount),
                'category' : category,
                'description' : description
               })
           next_id = max(next_id, int(id)+1)
   print("Expense loaded from the file.")
def main menu():
   load_expenses_from_file('expenses.txt')
   while True:
       print("\nPersonal Expense Tracker")
       print("1. Add Expense")
       print("2. View Expense")
        print("3. Delete Expense")
       print("4. Summary of Expenses")
       print("5. Save Expense to File")
        print("6. Exit")
        choice = input("Choose an option: ")
        if choice == '1':
           date = input("Enter date (YYYY-MM-DD): ")
           amount = float(input("Enter amount: "))
           category = input("Enter category: ")
           description = input("Enter description: ")
           add_Expense(date,amount,category,description)
        elif choice == '2':
           view_expenses()
        elif choice == '3':
           expense_id = int(input("Enter expense ID to delete: "))
           delete_expense(expense_id)
        elif choice == '4':
           generate_summary()
        elif choice == '5':
           save_expenses_to_file('expenses.txt')
        elif choice == '6':
           print("Exiting the program.")
           break
        else:
           print("Invalid Option, Please try again.")
main_menu()

    Expense loaded from the file.

     Personal Expense Tracker
     1. Add Expense
     2. View Expense
     3. Delete Expense
     4. Summary of Expenses
     5. Save Expense to File
     6. Exit
     Choose an option: 2
     Do you want to filter by (1) Date or (2) Category? (Enter '1', '2' or '0' for none):0
     ID: 1, Date: 2024-10-14, Amount: 245.0, Category: Food, Description: morning
     Personal Expense Tracker
     1. Add Expense
     2. View Expense
     3. Delete Expense
     4. Summary of Expenses
```

5. Save Expense to File 6. Exit Choose an option: 6 Exiting the program.

Start coding or generate with AI.

Start coding or $\underline{\text{generate}}$ with AI.