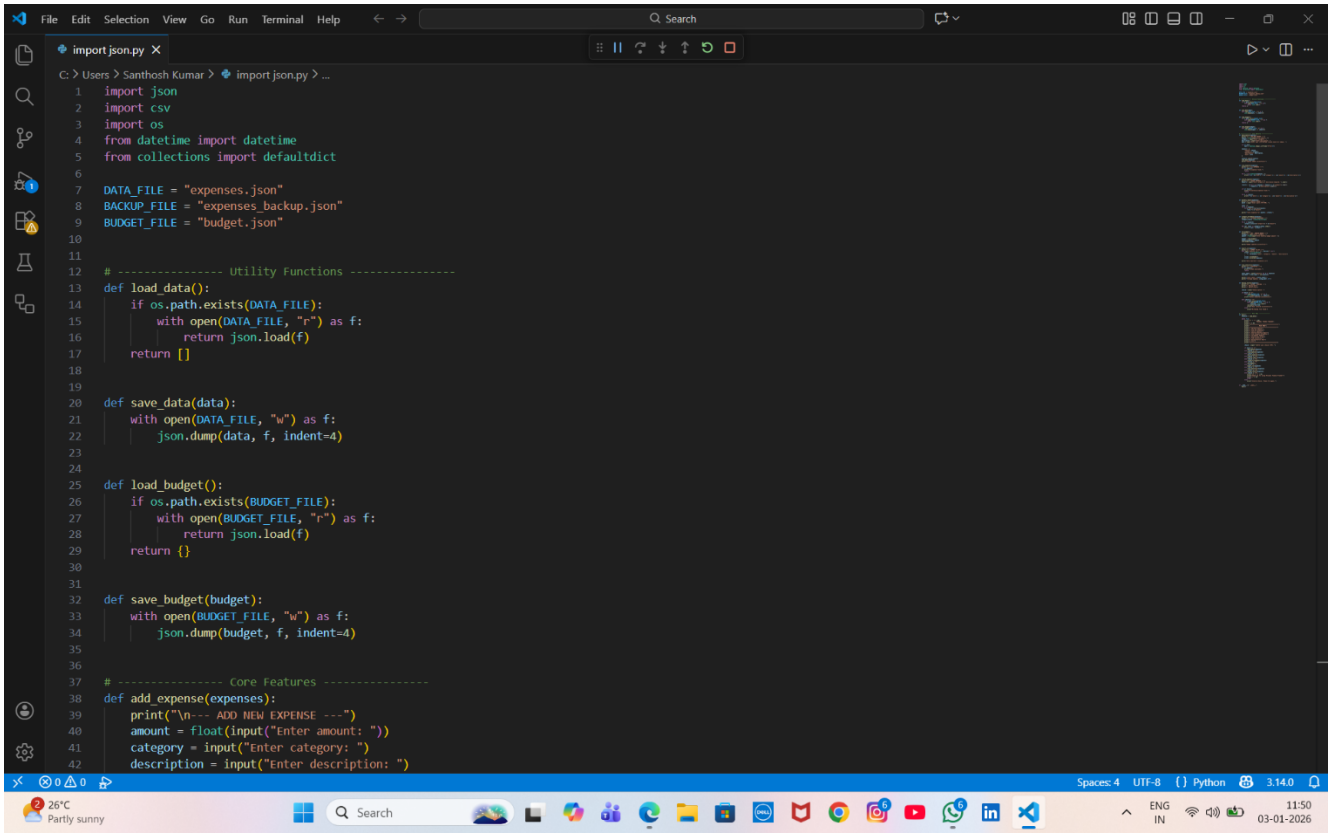
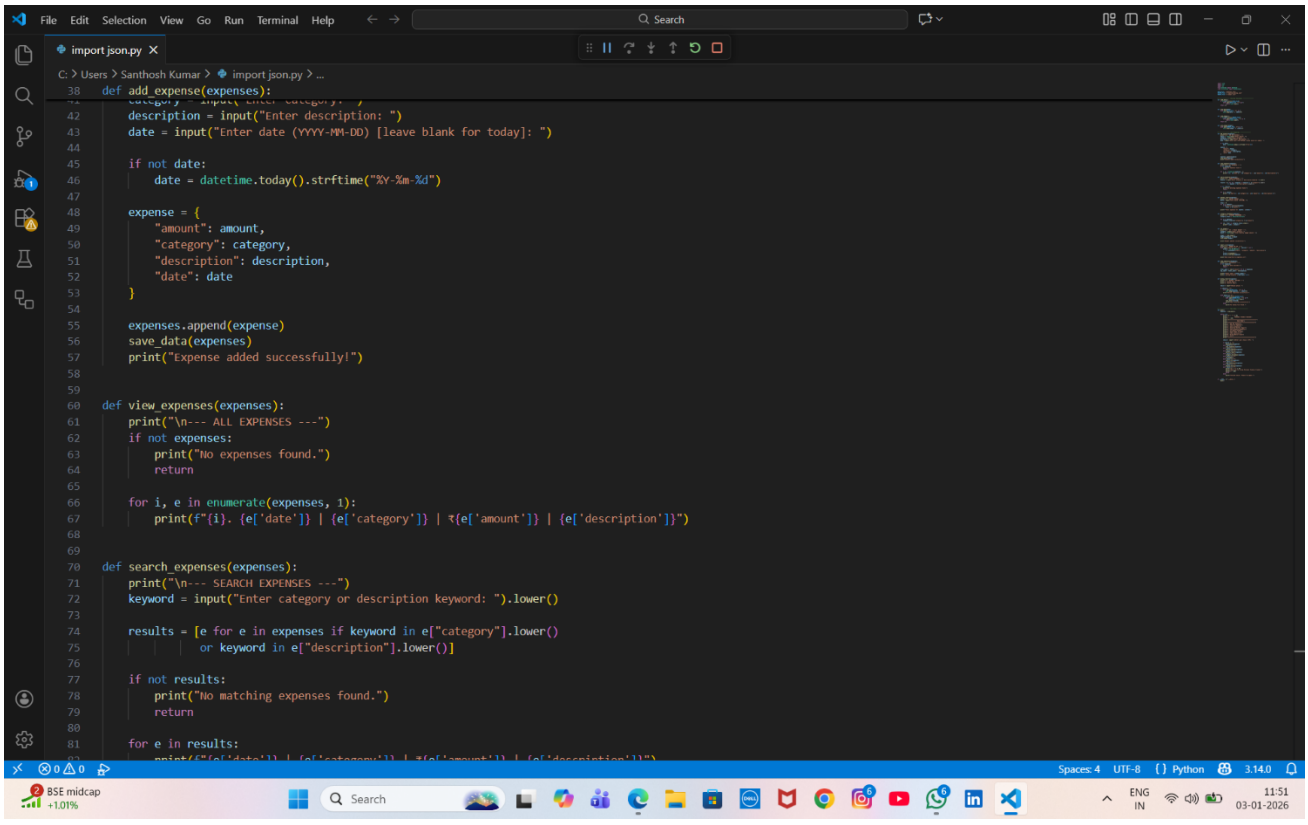
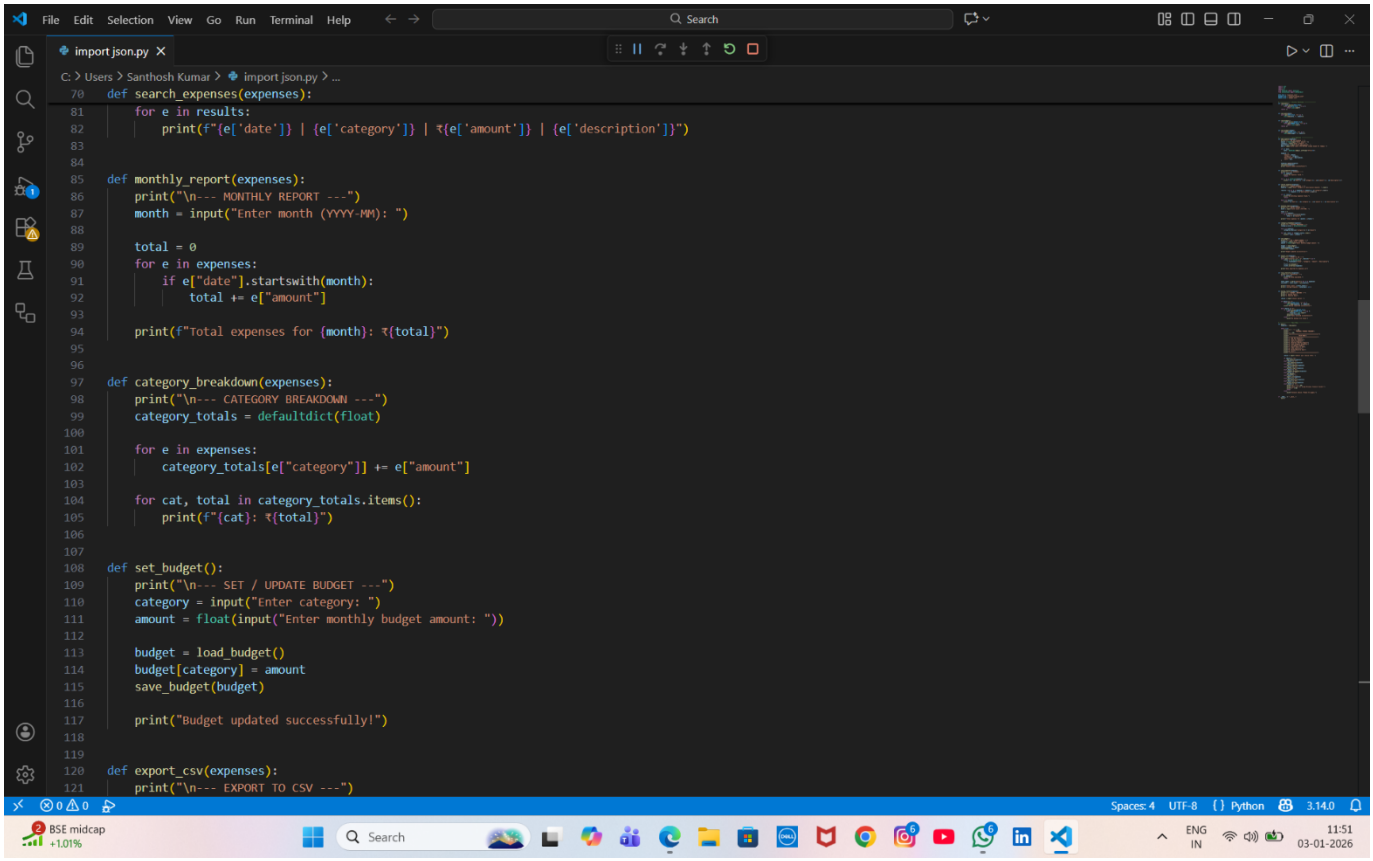
Personal Finance Tracker Code :



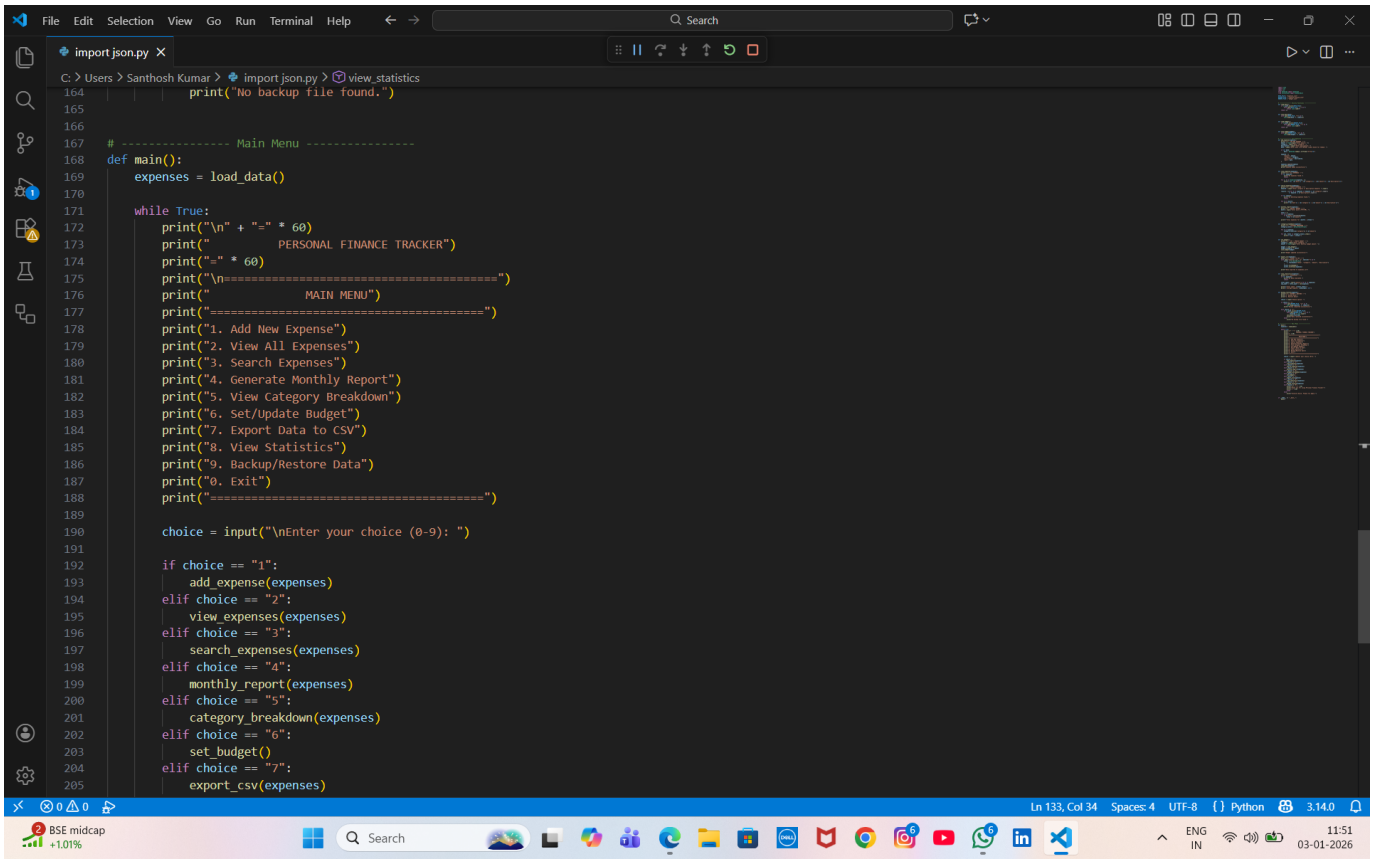
```python
import json
import csv
import os
from datetime import datetime
from collections import defaultdict

DATA_FILE = "expenses.json"
BACKUP_FILE = "expenses_backup.json"
BUDGET_FILE = "budget.json"


# ---------------- Utility Functions ----------------
def load_data():
    if os.path.exists(DATA_FILE):
        with open(DATA_FILE, "r") as f:
            return json.load(f)
    return []


def save_data(data):
    with open(DATA_FILE, "w") as f:
        json.dump(data, f, indent=4)


def load_budget():
    if os.path.exists(BUDGET_FILE):
        with open(BUDGET_FILE, "r") as f:
            return json.load(f)
    return {}


def save_budget(budget):
    with open(BUDGET_FILE, "w") as f:
        json.dump(budget, f, indent=4)


# ---------------- Core Features ----------------
def add_expense(expenses):
    print("\n--- ADD NEW EXPENSE ---")
    amount = float(input("Enter amount: "))
    category = input("Enter category: ")
    description = input("Enter description: ")
```



```python
def add_expense(expenses):
    description = input("Enter description: ")
    date = input("Enter date (YYYY-MM-DD) [leave blank for today]: ")

    if not date:
        date = datetime.today().strftime("%Y-%m-%d")

    expense = {
        "amount": amount,
        "category": category,
        "description": description,
        "date": date
    }

    expenses.append(expense)
    save_data(expenses)
    print("Expense added successfully!")


def view_expenses(expenses):
    print("\n--- ALL EXPENSES ---")
    if not expenses:
        print("No expenses found.")
        return

    for i, e in enumerate(expenses, 1):
        print(f"{i}. {e['date']} | {e['category']} | ₹{e['amount']} | {e['description']}")


def search_expenses(expenses):
    print("\n--- SEARCH EXPENSES ---")
    keyword = input("Enter category or description keyword: ").lower()

    results = [e for e in expenses if keyword in e["category"].lower()
               or keyword in e["description"].lower()]

    if not results:
        print("No matching expenses found.")
        return

    for e in results:
```

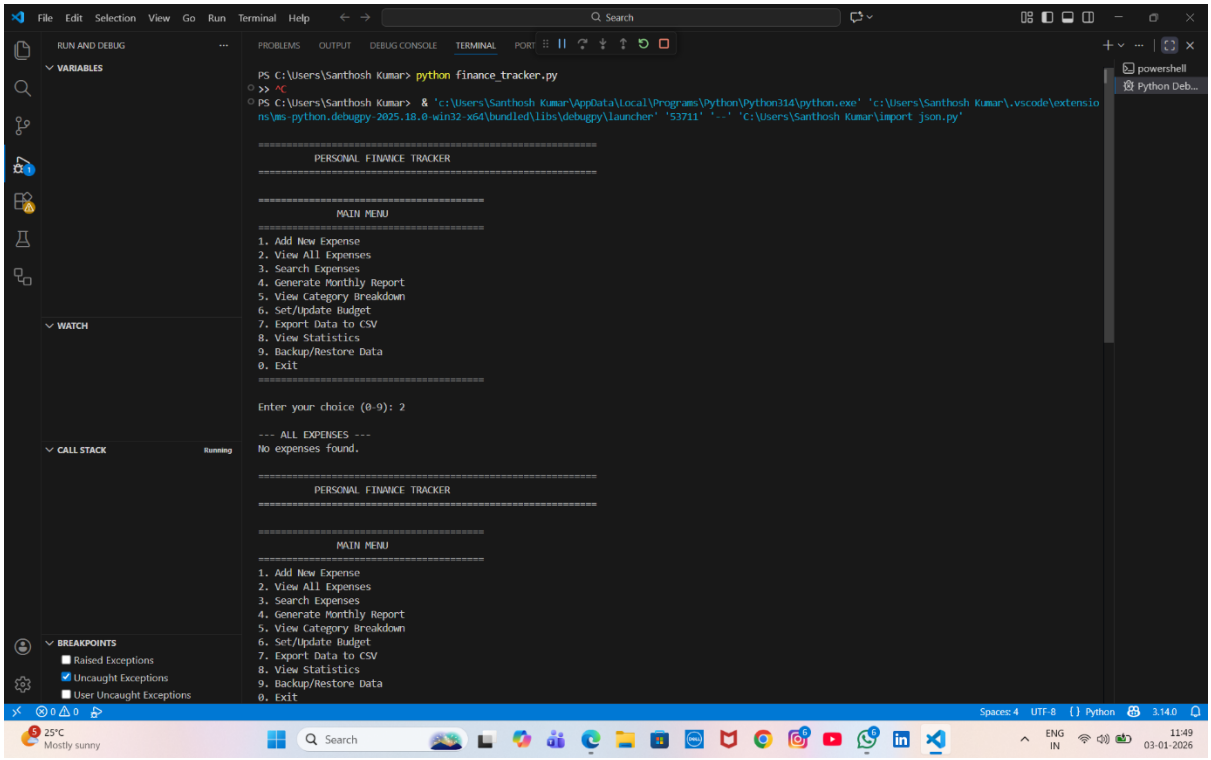


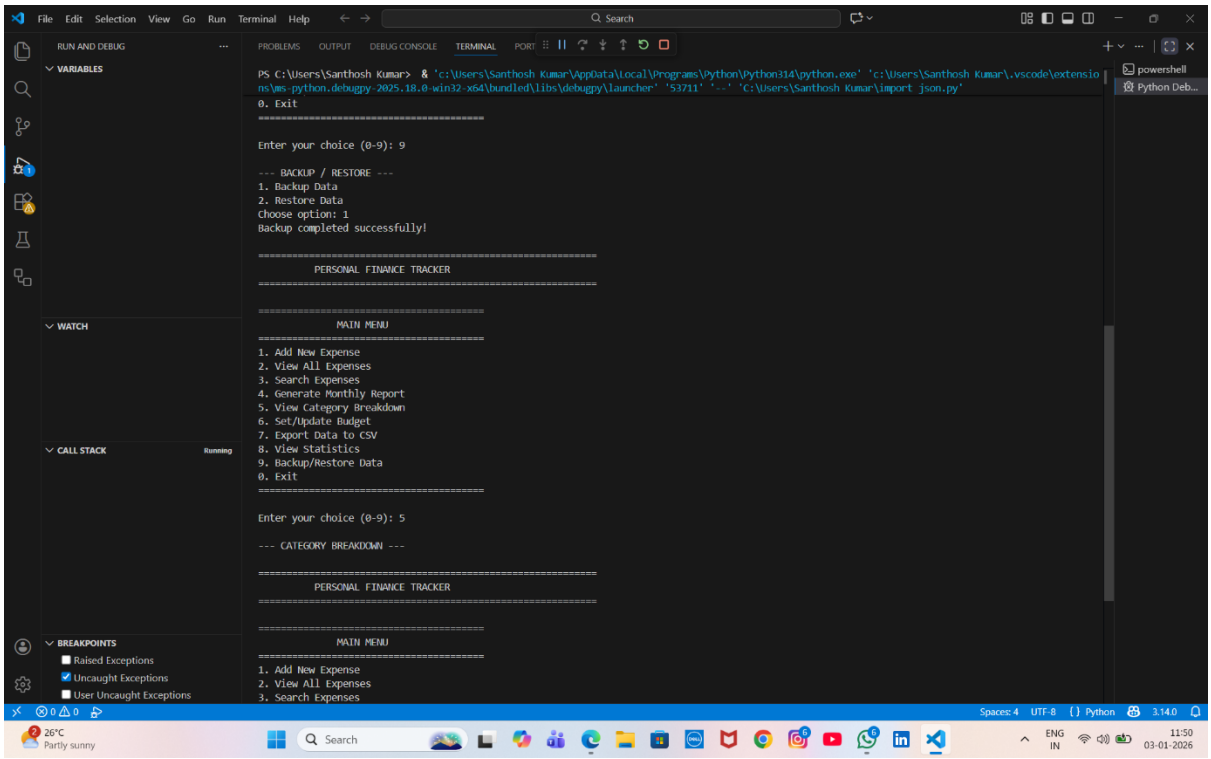
```
def search_expenses(expenses):
    for e in results:
        print(f"{e['date']} | {e['category']} | ₹{e['amount']} | {e['description']}")


def monthly_report(expenses):
    print("\n--- MONTHLY REPORT ---")
    month = input("Enter month (YYYY-MM): ")

    total = 0
    for e in expenses:
        if e["date"].startswith(month):
            total += e["amount"]

    print(f"Total expenses for {month}: ₹{total}")


def category_breakdown(expenses):
    print("\n--- CATEGORY BREAKDOWN ---")
    category_totals = defaultdict(float)

    for e in expenses:
        category_totals[e["category"]] += e["amount"]

    for cat, total in category_totals.items():
        print(f"{cat}: ₹{total}")


def set_budget():
    print("\n--- SET / UPDATE BUDGET ---")
    category = input("Enter category: ")
    amount = float(input("Enter monthly budget amount: "))

    budget = load_budget()
    budget[category] = amount
    save_budget(budget)

    print("Budget updated successfully!")


def export_csv(expenses):
    print("\n--- EXPORT TO CSV ---")
```



```
        print("No backup file found.")


# ---------------- Main Menu ----------------
def main():
    expenses = load_data()

    while True:
        print("\n" + "=" * 60)
        print("          PERSONAL FINANCE TRACKER")
        print("=" * 60)
        print("\n========================================")
        print("                MAIN MENU")
        print("========================================")
        print("1. Add New Expense")
        print("2. View All Expenses")
        print("3. Search Expenses")
        print("4. Generate Monthly Report")
        print("5. View Category Breakdown")
        print("6. Set/Update Budget")
        print("7. Export Data to CSV")
        print("8. View Statistics")
        print("9. Backup/Restore Data")
        print("0. Exit")
        print("========================================")

        choice = input("\nEnter your choice (0-9): ")

        if choice == "1":
            add_expense(expenses)
        elif choice == "2":
            view_expenses(expenses)
        elif choice == "3":
            search_expenses(expenses)
        elif choice == "4":
            monthly_report(expenses)
        elif choice == "5":
            category_breakdown(expenses)
        elif choice == "6":
            set_budget()
        elif choice == "7":
            export_csv(expenses)
```

Output:


PS C:\Users\Santhosh Kumar> python finance_tracker.py
>> ^C
PS C:\Users\Santhosh Kumar> & 'c:\Users\Santhosh Kumar\AppData\Local\Programs\Python\Python314\python.exe' 'c:\Users\Santhosh Kumar\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' '53711' '--' 'C:\Users\Santhosh Kumar\import json.py'
PERSONAL FINANCE TRACKER
MAIN MENU
1. Add New Expense
2. View All Expenses
3. Search Expenses
4. Generate Monthly Report
5. View Category Breakdown
6. Set/Update Budget
7. Export Data to CSV
8. View Statistics
9. Backup/Restore Data
0. Exit
Enter your choice (0-9): 2
--- ALL EXPENSES ---
No expenses found.
PERSONAL FINANCE TRACKER
MAIN MENU
1. Add New Expense
2. View All Expenses
3. Search Expenses
4. Generate Monthly Report
5. View Category Breakdown
6. Set/Update Budget
7. Export Data to CSV
8. View Statistics
9. Backup/Restore Data
0. Exit


PS C:\Users\Santhosh Kumar> & 'c:\Users\Santhosh Kumar\AppData\Local\Programs\Python\Python314\python.exe' 'c:\Users\Santhosh Kumar\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' '53711' '--' 'C:\Users\Santhosh Kumar\import json.py'
0. Exit
Enter your choice (0-9): 9
--- BACKUP / RESTORE ---
1. Backup Data
2. Restore Data
Choose option: 1
Backup completed successfully!
PERSONAL FINANCE TRACKER
MAIN MENU
1. Add New Expense
2. View All Expenses
3. Search Expenses
4. Generate Monthly Report
5. View Category Breakdown
6. Set/Update Budget
7. Export Data to CSV
8. View Statistics
9. Backup/Restore Data
0. Exit
Enter your choice (0-9): 5
--- CATEGORY BREAKDOWN ---
PERSONAL FINANCE TRACKER
MAIN MENU
1. Add New Expense
2. View All Expenses
3. Search Expenses