

Lahore College for Women University



Department of Software Engineering

Course: Data Structure

Submitted by: Zukhruf Afzal

Roll no: 24251652063

Section: C

Semester: 3

Submitted to: Ma'am Tuba Younas

Final Project

Source Code:

```
main.py [ ] Share Run
1 # List to store expenses
2 expenses = []
3
4 # Dictionary for category-wise total
5 category_total = {}
6
7 while True:
8     print("\n--- Smart Expense Tracker ---")
9     print("1. Add Expense")
10    print("2. View Expenses")
11    print("3. Category Summary")
12    print("4. Exit")
13
14    choice = input("Enter choice: ")
15
16    if choice == "1":
17        date = input("Enter date: ")
18        category = input("Enter category: ")
19        amount = int(input("Enter amount: "))
20
21        # Store expense in list
22        expenses.append([date, category, amount])
23
24        # Update dictionary
25        if category in category_total:
26            category_total[category] += amount
27        else:
28            category_total[category] = amount
29
30        print("Expense added!")
31
32    elif choice == "2":
33        print("\nAll Expenses:")
34        for e in expenses:
35            print("Date:", e[0], "Category:", e[1], "Amount:", e[2])
36
37    elif choice == "3":
38        print("\nCategory Wise Summary:")
39        for cat in category_total:
40            print(cat, ":", category_total[cat])
41
42    elif choice == "4":
43        print("Program Ended")
44        break
45
46    else:
47        print("Invalid choice")
```

Output:

Output

```
-- Smart Expense Tracker ---
1. Add Expense
2. View Expenses
3. Category Summary
4. Exit
Enter choice: 1
Enter date: 11-01-2026
Enter category: food
Enter amount: 3000
Expense added!

-- Smart Expense Tracker ---
1. Add Expense
2. View Expenses
3. Category Summary
4. Exit
Enter choice: 2

All Expenses:
Date: 11-01-2026 Category: food Amount: 3000

-- Smart Expense Tracker ---
1. Add Expense
2. View Expenses
3. Category Summary
4. Exit
Enter choice: 3

Category Wise Summary:
food : 3000

-- Smart Expense Tracker ---
1. Add Expense
2. View Expenses
3. Category Summary
4. Exit
Enter choice: 4
Program Ended

==== Code Execution Successful ====
```