

```
class ExpenseTracker:

    def __init__(self):

        self.expenses = {}


    def add_expense(self, category, amount):

        if category in self.expenses:

            self.expenses[category] += amount

        else:

            self.expenses[category] = amount


    def total_expense(self):

        return sum(self.expenses.values())


    def category_expense(self, category):

        return self.expenses.get(category, 0)


    def show_expenses(self):

        for category, amount in self.expenses.items():

            print(f"{category}: ${amount}")


def main():

    tracker = ExpenseTracker()


    while True:

        print("\nExpense Tracker Menu:")

        print("1. Add Expense")

        print("2. Show Total Expense")

        print("3. Show Expense by Category")
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print("4. Show All Expenses")
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print("5. Exit")
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choice = input("Enter your choice (1-5): ")
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```
if choice == '1':
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    category = input("Enter the category of expense: ")
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    amount = float(input("Enter the amount spent: "))
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    tracker.add_expense(category, amount)
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    print("Expense added successfully!")
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elif choice == '2':
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    print(f"Total Expense: ${tracker.total_expense()}")
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```
elif choice == '3':
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```
    category = input("Enter the category to show expense: ")
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```
    print(f"Expense for {category}: ${tracker.category_expense(category)}")
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elif choice == '4':
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```
    print("All Expenses:")
```

```
    tracker.show_expenses()
```

```
elif choice == '5':
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```
    print("Exiting...")
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```
    break
```

```
else:
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```
    print("Invalid choice! Please enter a number between 1 and 5.")
```

```
if __name__ == "__main__":
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```
    main()
```