

ALA-1

Code With Mistake Comments

```
print("Expense Splitter")
```

```
people = int(input("Enter number of people: "))
```

```
i = 0
```

```
total_expense = 0
```

```
while i < people:
```

```
    expense = int(input("Enter expense: "))
```

```
    total_expense = total_expense + expense
```

```
    i = i + 1
```

```
share = total_expense / people
```

Mistake 1: Division done before checking if people == 0 (may cause ZeroDivisionError)

```
print("Total Expense:", total_expense)
```

```
print("Each Share:", share)
```

```
if share < 0:
```

Mistake 2: Unnecessary condition (share normally cannot be negative)

```
    print("Invalid share")
```

```
if people = 0:
```

Mistake 3: Wrong operator (= used instead of ==)

```
    print("Cannot divide by zero")
```

Mistake 4: This code is on wrong place

Mistakes Explanation

1. Division before zero check

- If people is 0, program will crash.
- Zero must be checked before division.

2. Unnecessary negative share check

- Share will not be negative unless expenses are negative.
- Not required logically.

3. Wrong operator

- = is assignment.
- == is comparison.
- This causes Syntax Error.

Correct Code

```
print("Expense Splitter")
people = int(input("Enter number of people: "))
if people == 0:
    print("Cannot divide by zero")
else:
    i = 0
    total_expense = 0
    while i < people:
        expense = int(input("Enter expense: "))
        total_expense = total_expense + expense
        i = i + 1
    share = total_expense / people
    print("Total Expense:", total_expense)
    print("Each Share:", share)
```

OUTPUT:

```
"C:\Users\MALLA ALI MOHAMMAD\AppData\Local\Microsoft\WindowsApps\python3.11.exe" "D:\Collage\Python\Lab Prac\ALA1.py"
Expense Splitter
Enter number of people: 5
Enter expense: 200
Enter expense: 100
Enter expense: 300
Enter expense: 500
Enter expense: 750
Total Expense: 1850
Each Share: 370.0

Process finished with exit code 0
```