

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**
 - o If people is 0, program will crash.
 - o Zero must be checked before division.
2. **Unnecessary negative share check**
 - o Share will not be negative unless expenses are negative.
 - o Not required logically.
3. **Wrong operator**
 - o = is assignment.
 - o == is comparison.
 - o 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
```