ALA-1

Code With Mistake Comments

```
print ("Average Speed Calculator")
trips = int (input ("Enter number of trips: "))
i = 0
total_distance = 0
total
_time = 0
while i ‹ trips:
distance = int (input ("Enter distance: "))
time = int (input ("Enter time: "))
total_distance = total_distance + distance
total
_time = total_time + time
if time == 0:
print ("Invalid time")
else:
speed = distance / time
print ("Speed:", speed)
i = i + 1
average_speed = total_ distance / total
_time
print ("Average Speed:", average speed if average_speed > 60:
print ("Fast travel")
else:
print ("Slow travel")
```

Mistakes Explanation

1 . Indentation Error (Very Important)

Python requires proper indentation inside while and if-else blocks.

2. Broken Variable Name

total time was split into two lines.

Variable names must be written in one line.

3. Wrong Comparison Symbol

‹ is invalid in Python.

Correct operator is <.

4. Missing Colon (:)

Colon : is required after while, if, and else.

5. Invalid Variable Name

average speed contains a space.

Variable names cannot contain spaces. Use average speed.

6. Division by Zero Risk

If total time is 0, division will cause an error.

Correct Code

```
print("Average Speed Calculator")


trips = int(input("Enter number of trips: "))


i = 0
total_distance = 0
total_time = 0


while i < trips:
    distance = int(input("Enter distance: "))
    time = int(input("Enter time: "))


    if time == 0:
        print("Invalid time")
    else:
        total_distance = total_distance + distance
        total_time = total_time + time


        speed = distance / time
        print("Speed:", speed)


    i = i + 1
```
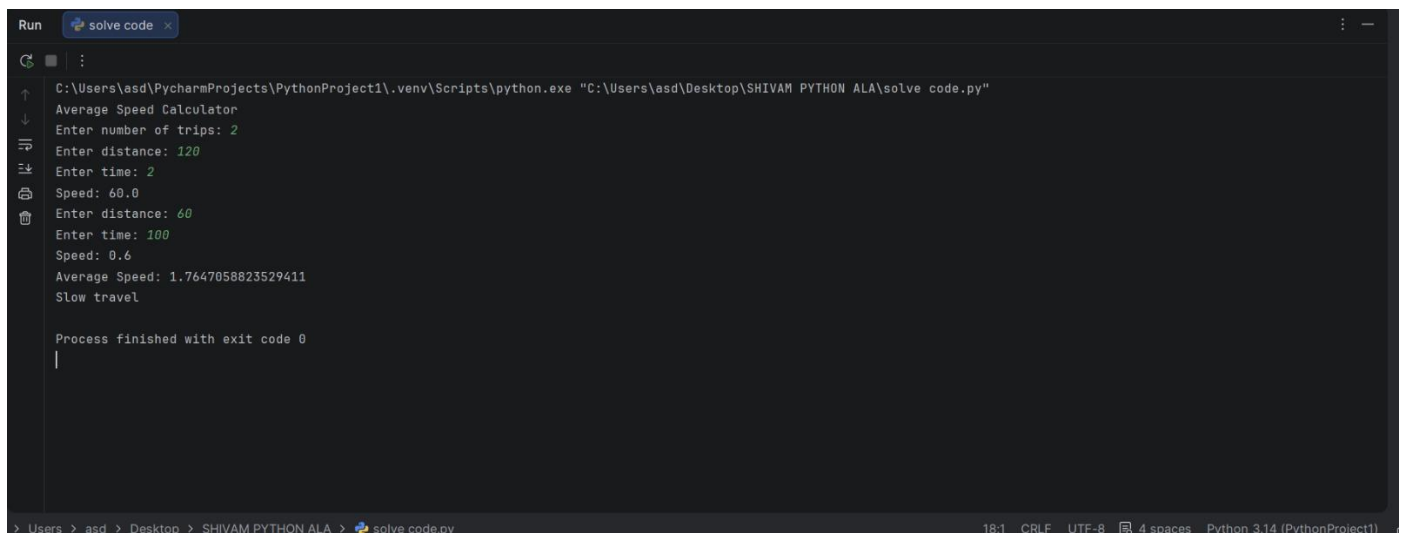
if total_time == 0:

   print("Cannot calculate average speed")

else:

   average_speed = total_distance / total_time

   print("Average Speed:", average_speed)

   if average_speed > 60:

     print("Fast travel")

   else:

     print("Slow travel")

output:

```
C:\Users\asd\PycharmProjects\PythonProject1\.venv\Scripts\python.exe "C:\Users\asd\Desktop\SHIVAM PYTHON ALA\solve code.py"
Average Speed Calculator
Enter number of trips: 2
Enter distance: 120
Enter time: 2
Speed: 60.0
Enter distance: 60
Enter time: 100
Speed: 0.6
Average Speed: 1.7647058823529411
Slow travel

Process finished with exit code 0
```