ALA:-1 : Debugging Detective

Error Code:-

print("Fibonacci Series Analyzer") n = int(input("Enter limit: "))

❌ ERROR: Two statements written on the same line (SyntaxError)

a = 0

b = 1

count = 0

sum_total = 0

while count < n:

✅ Correct line

print(a)

❌ ERROR: Indentation missing (must be inside while loop)

sum_total = sum_total + a

❌ ERROR: Indentation missing

next = a + b

⚠️ ERROR: 'next' is a built-in function name (bad practice)

a = b

❌ ERROR: Indentation missing

b = next

❌ ERROR: Indentation missing

```python
count = count + 1
# ❌ ERROR: Indentation missing


if sum_total % 2 = 0:
# ❌ ERROR: '=' used instead of '==' (SyntaxError)


    print("Even sum")
# ✅ Correct


else:
# ✅ Correct


print("Odd sum")
# ❌ ERROR: Indentation missing under else


print("Total Sum:", sum_total
# ❌ ERROR: Missing closing parenthesis ')'


if sum_total > 50:
# ✅ Correct


    print("Large series")
# ✅ Correct


else:
# ✅ Correct


print("Small series")
```

❌ ERROR: Indentation missing under else

Correct Code:-

```python
print("Fibonacci Series Analyzer")
n = int(input("Enter limit: "))

a = 0
b = 1
count = 0
sum_total = 0

while count < n:
    print(a)
    sum_total = sum_total + a
    next = a + b
    a = b
    b = next
    count = count + 1

if sum_total % 2 == 0:
    print("Even sum")
else:
    print("Odd sum")

print("Total Sum:", sum_total)

if sum_total > 50:
    print("Large series")
else:
    print("Small series")
```
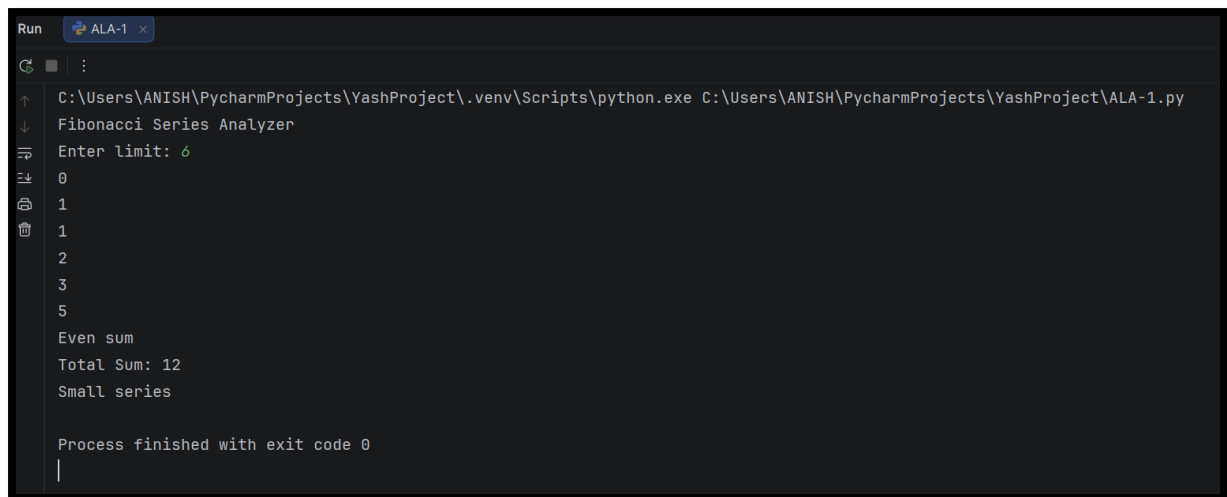
OUTPUT:-

```
Run      ALA-1  ×

C:\Users\ANISH\PycharmProjects\YashProject\.venv\Scripts\python.exe C:\Users\ANISH\PycharmProjects\YashProject\ALA-1.py
Fibonacci Series Analyzer
Enter limit: 6
0
1
1
2
3
5
Even sum
Total Sum: 12
Small series

Process finished with exit code 0
```