

Report

Error code:

```
print("Magic Square Checker")
n = int(input("Enter size of square: "))
total_sum = 0
row_sum = 0
i = 0
while i < n:
    j = 0
    row_sum = 0
    while j < n:
        value = int(input("Enter number: "))
        row_sum = row_sum + value
        j = j + 1
    if i == 0:
        total_sum = row_sum
    else:
        if row_sum != total_sum:
            print("Not Magic Square")
    i = i + 1
if row_sum == total_sum:
    print("Magic Square")
else:
    print("Not Magic")
if total_sum % 2 == 0:
    print("Even magic constant")
else:
    print("Odd magic constant")
```



The screenshot shows the PyCharm IDE interface with a dark theme. A terminal window is open under the 'Run' tab, titled 'error-Magic Square Checker'. The terminal output shows the following error message:

```
Run error-Magic Square Checker ×
G | ...
↑ C:\Users\KIRANBHAI\PycharmProjects\name\.venv\Scripts\python.exe "C:\Users\KIRANBHAI\PycharmProjects\name\error-Magic Square Checker.py"
↓ File "C:\Users\KIRANBHAI\PycharmProjects\name\error-Magic Square Checker.py", line 7
    j = 0
    ^
-indentationError: expected an indented block after 'while' statement on line 6
Process finished with exit code 1
```

List of Errors:

1) Indentation Error

- The statements inside the while loop are not indented.
- The statements inside if and else are not indented.
- Python requires proper indentation to define blocks.

2) Wrong Comparison Operator

- `if total_sum % 2 = 0:`
- `=` is assignment operator.
- Comparison operator `==` is required.
- It should be:
✓ `if total_sum % 2 == 0:`

3) Logical Placement Issue

- The condition:
✓ `if row_sum == total_sum:`
- is outside the loop.
- It only checks the **last row**, not all rows.
- This may incorrectly print "Magic Square".

4) Incomplete Magic Square Check

- The program checks only **row sums**.
- It does not check:
 - Column sums
 - Main diagonal
 - Secondary diagonal
- A true magic square requires all of these to be equal.

5) No Control Variable (Flag Missing)

- When a row sum is not equal:
✓

```
if row_sum != total_sum:  
    print("Not Magic Square")
```
- The program continues running.
- A flag variable like `is_magic = False` should be used.

6) Inconsistent Output Messages

- The program prints:
- "Not Magic Square"
- "Not Magic"
- Both mean the same but are written differently.

7) Values Not Stored

- The square values are not stored in a 2D list.
- Without storing values, checking columns and diagonals is not possible.

Corrected code:

```
print("Magic Square Checker")

n = int(input("Enter size of square: "))

total_sum = 0
row_sum = 0

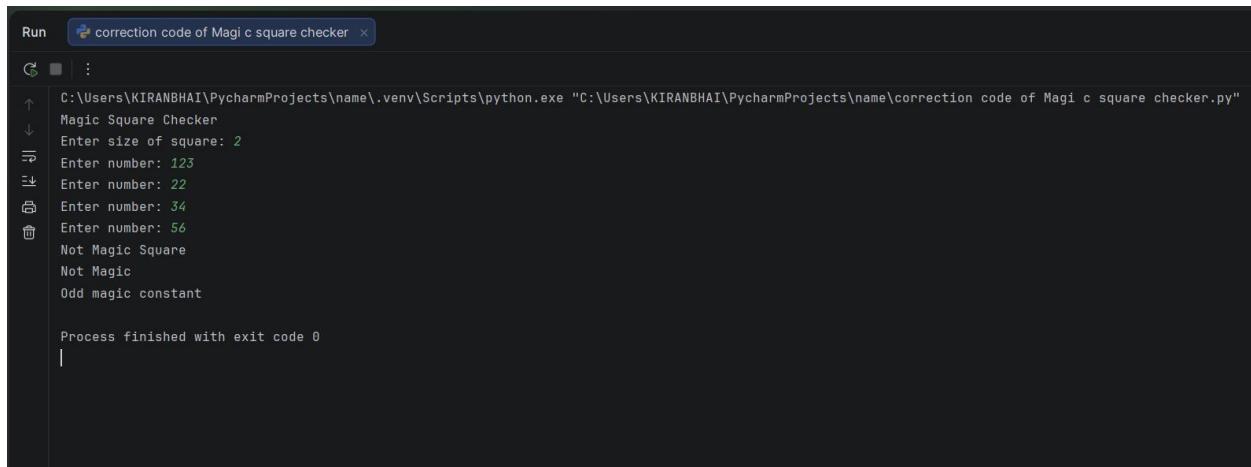
i = 0
while i < n:
    j = 0
    row_sum = 0
    while j < n:
        value = int(input("Enter number: "))
        row_sum = row_sum + value
        j = j + 1

    if i == 0:
        total_sum = row_sum
    else:
        if row_sum != total_sum:
            print("Not Magic Square")

    i = i + 1

if row_sum == total_sum:
    print("Magic Square")
else:
    print("Not Magic")
```

```
if total_sum % 2 == 0:  
    print("Even magic constant")  
else:  
  
    print("Odd magic constant")
```



```
Run correction code of Magic square checker  
C:\Users\KIRANBHAI\PycharmProjects\name\venv\Scripts\python.exe "C:\Users\KIRANBHAI\PycharmProjects\name\correction code of Magic square checker.py"  
Magic Square Checker  
Enter size of square: 2  
Enter number: 123  
Enter number: 22  
Enter number: 34  
Enter number: 56  
Not Magic Square  
Not Magic  
Odd magic constant  
Process finished with exit code 0
```