

Error Log Entry

What error message did you encounter (if any)?
No error messages

What unexpected behavior did your program exhibit?

1. It didn't end the program when it returned into the original two numbers.
2. It displayed the sum of the digits rather than just the last digit

What caused the issue? (e.g., syntax error, logic error, incorrect function usage, etc.)

1. Logic Error - Mixed up variable needed
2. Logic Error - Mixed up what variable represent what value

Include a screenshot of specific lines of code.

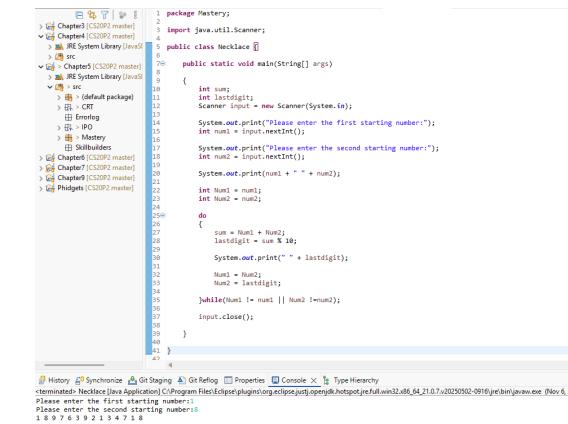
```
1..     NUM2 = lastdigit;           2..     do
2..     {                           sum = Num1 + Num2;
3..         while(lastdigit != num1 || lastdigit !=num2);           lastdigit = sum % 10;
4..             System.out.print(sum);
5..             Num1 = Num2;
6..             Num2 = lastdigit;
7..         }while(lastdigit != num1 || lastdigit !=num2);
```

How did you fix the issue?

1. Changed the condition of the while to the correct variable of Num1 so it returns true when it comes back to the original digits instead of just the last digit that keeps changing
2. Changed 'sum' to 'lastdigit' so it displayed only the ones place digit instead of the whole number

Provide the corrected code or solution using a screenshot.

```
1.. }while(Num1 != num1 || Num2 !=num2);           2..     do
2..     {                           sum = Num1 + Num2;
3..         lastdigit = sum % 10;
4..         System.out.print(" " + lastdigit);
5..         Num1 = Num2;
6..         Num2 = lastdigit;
7..     }while(lastdigit != num1 || lastdigit !=num2);
```



```
1 package Mastery;
2 import java.util.Scanner;
3
4 public class Necklace {
5     public static void main(String[] args)
6     {
7         int num1;
8         int num2;
9         int lastdigit;
10        Scanner input = new Scanner(System.in);
11        System.out.print("Please enter the first starting number:");
12        int num1 = input.nextInt();
13        System.out.print("Please enter the second starting number:");
14        int num2 = input.nextInt();
15        System.out.print("Please enter the second starting number:");
16        int num2 = input.nextInt();
17        System.out.print(num1 + " " + num2);
18        System.out.print(num1 + " " + num2);
19        int Num1 = num1;
20        int Num2 = num2;
21        int sum = 0;
22        int lastdigit;
23        do
24        {
25            sum = Num1 + Num2;
26            lastdigit = sum % 10;
27            System.out.print(" " + lastdigit);
28            Num1 = Num2;
29            Num2 = lastdigit;
30        }while(Num1 != num1 || Num2 !=num2);
31        input.close();
32    }
33}
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```

terminated: Necklace [java Application] C:\Program Files\Eclipse\plugins\org.eclipse.jdt.core\hotspot\jre\full\win32\jre\bin\javaw.exe (Nov 6, 2025 02:09:16)
Please enter the first starting number:1
Please enter the second starting number:1
1 8 9 7 6 5 4 3 2 1 3 4 7 1 8