

Week 3-1

**Operators and Expressions, Managing Input and Output Operations**

Roll no: 240801137

Name: Jhanani .M

## Attempt 1

<b>Status</b>	Finished
<b>Started</b>	Monday, 23 December 2024, 5:33 PM
<b>Completed</b>	Thursday, 24 October 2024, 9:37 AM
<b>Duration</b>	60 days 7 hours

### Problem 1:

Write a program to read two integer values and print true if both the numbers end with the same digit, otherwise print false. Example: If 698 and 768 are given, program should print true as they both end with 8. Sample Input 1 25 53 Sample Output 1 false Sample Input 2 27 77 Sample Output 2 true

### Code

```
1 #include<stdio.h>
2 int main()
3 {
4     int num1,num2;
5     scanf("%d %d",&num1,&num2);
6     int lastDigit1 =num1 % 10;
7     int lastDigit2 = num2 % 10;
8     if(lastDigit1 == lastDigit2){
9         printf("true\n");
10    }else{
11        printf("false\n");
12    }
13    return 0;
14 }
15 }
```

### OUTPUT:

	Input	Expected	Got	
✓	25 53	false	false	✓
✓	27 77	true	true	✓

Passed all tests! ✓

## **Problem 2:**

In this challenge, we're getting started with conditional statements.

Task

Given an integer,  $n$ , perform the following conditional actions:

- If  $n$  is odd, print Weird
- If  $n$  is even and in the inclusive range of 2 to 5, print Not Weird
- If  $n$  is even and in the inclusive range of 6 to 20, print Weird
- If  $n$  is even and greater than 20, print Not Weird

Complete the stub code provided in your editor to print whether or not  $n$  is weird.

## **Input Format**

A single line containing a positive integer,  $n$ .

## **Constraints**

- $1 < n < 100$

## **Output Format**

Print Weird if the number is weird; otherwise, print Not Weird.

### **Sample Input 0**

3

### **Sample Output 0**

Weird

### **Sample Input 1**

24

### **Sample Output 1**

Not Weird

### **Explanation**

Sample Case 0:  $n = 3$

$n$  is odd and odd numbers are weird, so we print Weird.

Sample Case 1:  $n = 24$

$n > 20$  and  $n$  is even, so it isn't weird. Thus, we print Not Weird.

### Code :

```
1 #include<stdio.h>
2 int main()
3 {
4     int n;
5     scanf("%d",&n);
6     if (n % 2!= 0){
7         printf("Weird\n");
8     }else{
9         if(n>=2 && n<=5){
10             printf("Not Weird\n");
11         }else if(n>=6 &&n<=20){
12             printf("Weird\n");
13         }else if(n>20){
14             printf("Not Weird\n");
15         }
16     }
17 }
18 return 0;
19 }
```

### OUTPUT:

	Input	Expected	Got	
✓	3	Weird	Weird	✓
✓	24	Not Weird	Not Weird	✓

Passed all tests! ✓

### Problem 3:

Three numbers form a Pythagorean triple if the sum of squares of two numbers is equal to the square of the third. For example, 3, 5 and 4 form a Pythagorean triple, since  $3^2 + 4^2 = 25 = 5^2$ . You are given three integers, a, b, and c. They need not be given in increasing order. If they form a Pythagorean triple, then print "yes", otherwise, print "no".

Please note that the output message is in small letters. Sample Input 1 3 5 4

Sample Output 1 yes Sample Input 2 5 8 2 Sample Output 2 no

### Code:

```
1 #include<stdio.h>
2 int main()
3 {
4     int a,b,c;
5     scanf("%d %d %d",&a,&b,&c);
6     if((a * a + b * b == c * c) ||
7        (a * a + c * c == b * b) ||
8        (b * b + c * c == a * a)){
9         printf("yes\n");
10    }else{
11        printf("no\n");
12    }
13    return 0;
14 }
```

### OUTPUT:

	Input	Expected	Got	
✓	3 5 4	yes	yes	✓
✓	5 8 2	no	no	✓

Passed all tests! ✓