Week 3-1

Operators and Expressions, Managing Input and Output Operations

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| Attempt 1 | |
|---|---|
| **Status** | Finished |
| **Started** | Monday, 23 December 2024, 5:33 PM |
| **Completed** | Saturday, 26 October 2024, 2:08 PM |
| **Duration** | 58 days 3 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**

```c
#include <stdio.h>
int main()
{
    int n1 , n2;
    scanf("%d %d",&n1,&n2);
    int TG1 = n1%10;
    int TG2 = n2%10;
    if(TG1 == TG2){
        printf("true");
    }
    else{
        printf("false");
    }
}
```

**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 :**

```c
#include <stdio.h>
int main()
{
    int n;
    scanf("%d",&n);

    if(n%2 != 0){
        printf("Weird");
    }

    else if(n%2 == 0 || 6 < n || n < 20){
        printf("Not Weird");
    }

    else{
        printf("Not Weird");

        if(2 < n && n < 5 && n > 20){
            printf("Not Weird");
        }


    }
    return 0;
}
```

**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*3 + 4*4 = 25 = 5*5 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:**

```c
#include <stdio.h>
int main()
{
    int a , b , c;
    scanf("%d %d %d",&a,&b,&c);
    if((a*a + b * b == c * c) || (a * a + c * c == b * b) || (b * b + c * c == a * a)){
        printf("yes");
    }
    else{
        printf("no");
    }

    return 0;
}
```

**OUTPUT:**

| | Input | Expected | Got | |
|---|---|---|---|---|
| ✓ | 3<br>5<br>4 | yes | yes | ✓ |
| ✓ | 5<br>8<br>2 | no | no | ✓ |

Passed all tests! ✓