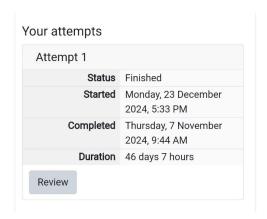Week 3 – 1:

--Coding-C-Language Features-Optional.

ROLL NO.:240801194

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Q1) 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
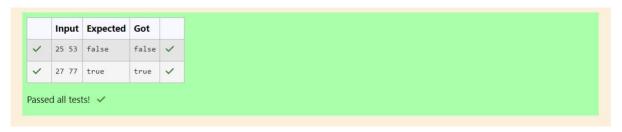
false

Sample Input 2

27 77

Sample Output 2

true

Code:

OUTPUT:

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

Passed all tests! ✓

Q2) 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.
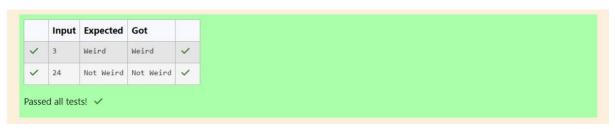
Sample Input 0

3

Sample Output 0

Weird Code:

```c
#include <stdio.h>
int main(){
    int a;
    scanf("%d",&a);
    if (a%2 == 0){
        if (a>=2 && a<=5){
            printf("Not Weird");
        }
        else if (a>=6 && a<=20){
            printf("Weird");
        }
        else if (a>20){
            printf("Not Weird");
        }
    }
    else if (a%2!= 0){
        printf("Weird");
    }
    else{
        printf("Not Weird");
    }
    return 0;
}
```

OUTPUT:

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

Passed all tests! ✓

Q3) 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

Code:

```c
1  #include <stdio.h>
2  int main(){
3      int a,b,c;
4      //int ab = a*a+b*b;
5      scanf("%d %d %d",&a,&b,&c);
6      // int ab = a*a+(b*b);
7      if (a>=b && a>=c){
8          int ab = b*b + (c*c);
9          if (ab == a*a){
10             printf("yes");
11         }
12         else{
13             printf("no");
14         }
15     }
16     else if(b>=a && b>=c){
17         int ab = a*a+(c*c);
18         if (ab == b*b){
19             printf("yes");
20         }
21         else{
22             printf("no");
23         }
24     }
25     else if(c>=a && c>=b){
26         int ab = a*a+(b*b);
27         if (ab == c*c){
28             printf("yes");
29         }
30         else{
31             printf("no");
32         }
33         // printf("yes");
34     }
35     else{
36         printf("no");
37     }
38     return 0;
39
40 }
```

OUTPUT:

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

Passed all tests! ✓