

# GE23131-Programming Using C-2024

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## Week 3-1 :

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Saturday, 26 October 2024, 2:50 PM
Duration	58 days 2 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:

Answer: (penalty regime: 0 %)

```
1 #include <stdio.h>
2 int main()
3 {
4     int a,b,last1,last2;
5     scanf("%d%d",&a,&b);
6     last1 = a%10;
7     last2 = b%10;
8     if(last1==last2)
9     {
10        printf("true");
11    }
12    else{
13        printf("false");
14    }
15    return 0;
16 }
```

## 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

## CODE:

```
1 #include <stdio.h>
2 int main(){
3     int a;
4     scanf("%d",&a);
5     if (a%2 == 0){
6         if (a>=2 && a<=5){
7             printf("Not Weird");
8         }
9         else if (a>=6 && a<=20){
10            printf("Weird");
11        }
12        else if (a>20){
13            printf("Not Weird");
14        }
15    }
16    else if (a%2!= 0){
17        printf("Weird");
18    }
19    else{
20        printf("Not Weird");
21    }
22    return 0;
23 }
```

## 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

## CODE:

```
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! ✓