

Week- 3 - 01:

--Coding-C-Language Features-Optional.

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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

```
1  #include <stdio.h>
2
3  int main(){
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     }
11     else{
12         printf("false\n");
13     }
14     return 0;
15 }
```

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:

```

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

```

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  $3^2 + 4^2 = 25 = 5^2$

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

OUTPUT:

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

Passed all tests! ✓