

Week 3 – 1:

--Coding-C-Language Features-Optional.

ROLL NO.:240801165

Name: KIRTHIVARSHAN S

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:

<b>Status</b>	Finished
<b>Started</b>	Monday, 23 December 2024, 5:33 PM
<b>Completed</b>	Saturday, 26 October 2024, 2:52 PM
<b>Duration</b>	58 days 2 hours

Question 1  
Correct  
Marked out of 3.00  
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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

**Answer:** (penalty regime: 0 %)

```
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:

Answer: (penalty regime: 0 %)

```
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     }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    return 0;
18 }
```

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:

Answer: (penalty regime: 0 %)

```
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    return 0;
12 }
13
14
```

OUTPUT:

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

Passed all tests! ✓