

Week 3 – 1:

--Coding-C-Language Features-Optional.

ROLL NO.:240801174

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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:

Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
Completed	Saturday, 26 October 2024, 2:32 PM
Duration	58 days 3 hours

Question 1

Correct

Marked out of 3.00

Flag question

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 int main()
3 {
4     int a,b;
5     scanf("%d %d",&a,&b);
6     if(a%10==b%10)
7     {
8         printf("true");
9     }
10    else
11    {
12        printf("false");
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  int main()
3  {
4      int n;
5      scanf("%d",&n);
6      if(n%2==0 && n<=5)
7      {
8          printf("Not Weird");
9      }
10     else if(n%2==0 && n<=20 )
11     {
12         printf("Weird");
13     }
14     else if(n%2==0 && n>20)
15     {
16         printf("Not Weird");
17     }
18     else
19     {
20         printf("Weird");
21     }
22
23     return 0;
24 }
```

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 int main()  
3 {  
4     int a, b, c;  
5     scanf("%d %d %d",&a,&b,&c);  
6     if(a*a + b*b == c*c || b*b + c*c == a*a || c*c + a*a == b*b)  
7     {  
8         printf("yes");  
9     }  
10    else  
11    {  
12        printf("no");  
13    }  
14    return 0;  
15 }
```

OUTPUT:

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

Passed all tests! ✓