Week-03-Decision Making and Branching - if, if...else and nested if...else, if...else if and switch...case

Week-03-01-Practice Session-Coding

Question **1**

Correct

Marked out of

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

Source code

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>

int main(){
    int a,b;

    scanf("%d %d",&a,&b);

    if(a%10==b%10){
        printf("true");
    }
    else{
        printf("false");
    }

    return 0;
}
```

Result

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

Passed all tests! ✓

Question **2**

Correct

Marked out of 5.00

Flag question

Objective

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

- $1 \leq n \leq 100$

Output Format

Print Weird if the number is weird; otherwise, print Not Weird.

Source code

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>

int main(){
    int n;

    scanf("%d",&n);

    if(n%2!=0){
        printf("Weird");
    }
    else if(n%2==0 && n>=2 && n<=5){
        printf("Not Weird");
    }
    else if(n%2==0 && n>=6 && n<=20){
        printf("Weird");
    }
    else if(n%2==0 && n>20){
        printf("Not Weird");
    }
    else{
        return 0;
    }
}
```

Result

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

Passed all tests! ✓

Question **3**

Correct

Marked out of 7.00

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 Sample Input 2 5 8 2 Sample Output 2 no

Source code

Answer: (penalty regime: 0 %)

```
#include<stdio.h>

int main(){
    int a,b,c;

    scanf("%d %d %d",&a,&b,&c);

    if((a*a)+(c*c)==(b*b)){
        printf("yes");
    }
    else if((a*a)+(b*b)==(c*c)){
        printf("yes");
    }
    else{
        printf("no");
    }
    return 0;
}
```

Result

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

Passed all tests! ✓