

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

### Week-03-01-Practice Session-Coding

Question 1

Correct

Marked out of 3.00

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 %)

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

### 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.

Source Code

Answer: (penalty regime: 0 %)

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

Result

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

Passed all tests! ✓

Question 3

Correct

Marked out of 7.00

Flag question

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 Sample Input 2 5 8 2 Sample Output 2 no

## Source Code

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int a,b,c;
5     scanf("%d %d %d\n",&a,&b,&c);
6     if(a*a+b*b==c*c || b*b+c*c==a*a || a*a+c*c==b*b)
7         printf("yes");
8     else
9         printf("no");
10    return 0;
11
12 }
```

## Result

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

Passed all tests! ✓