

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
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     a=a%10;
7     b=b%10;
8     if(a==b)
9     {
10        printf("true");
11    }
12    else
13    {
14        printf("false");
15    }
16    return 0;
17 }
```

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

- $1 \leq n \leq 100$

Source code:

```

1  #include<stdio.h>
2  int main()
3  {
4      int n;
5      scanf("%d",&n);
6      if(n>=1 && n<=100)
7      {
8          n=n%2;
9          if(n==0)
10         {
11             if(n>=2 && n<=5)
12             {
13                 printf("Not Weird");
14             }
15             else if(n>=6 && n<=20)
16             {
17                 printf("Weird");
18             }
19             else
20             {
21                 printf("Not Weird");
22             }
23         }
24         else
25         {
26             printf("Weird");
27         }
28         return 0;
29     }
30 }
```

Result:

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

Passed all tests! ✓

Question 3

Correct

Marked out of 7.00

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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

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) || ((a*a+c*c)==b*b))
7     {
8         printf("yes");
9     }
10    else
11    {
12        printf("no");
13    }
14    return 0;
15 }
```

Result:

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

Passed all tests! ✓