

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

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 x,y,one,two;
5     scanf("%d %d",&x,&y);
6     one = x % 10;
7     two = y % 10;
8     if(one == two)
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.

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 == 0)
7      {
8          if(n>=2 && n<=6)
9          {
10             printf("Not Weird");
11          }
12          else if(n>=6 && n<=20)
13          {
14             printf("Weird");
15          }
16          else
17          {
18             printf("Not Weird");
19          }
20      }
21
22      else
23      {
24          printf("Weird");
25      }
26      return 0;
27 }
```

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",&a,&b,&c);
6     if((a*a)+(b*b) == (c*c))
7     {
8         printf("yes");
9     }
10    else if((a*a)+(c*c) == (b*b))
11    {
12        printf("yes");
13    }
14    else if((b*b)+(c*c) == (a*a))
15    {
16        printf("no");
17    }
18    else
19    {
20        printf("no");
21    }
22    return 0;
23 }
```

Result

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

Passed all tests! ✓