

WEEK 3-01

Decision Making and Branching – if, if...else, nested if...else, if...else if, Switch-Case

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Attempt 2	
Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
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Duration	47 days 20 hours

PROGRAM 1: 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:

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\n");
9      }
10     else
11     {
12         printf("false\n");
13     }
14     return 0;
15 }
```

OUTPUT:

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

Passed all tests! ✓

PROGRAM 2: 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:

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 <= 5)
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     else
22     {
23         printf("Weird");
24     }
25     return 0;
26 }
```

OUTPUT:

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

Passed all tests! ✓

PROGRAM 3: 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

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) || (a*a)+(c*c)==(b*b) || (b*b)+(c*c)==(a*a))
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! ✓