Week 3 – 1

ROLL NO.:240801167

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Status	Finished
Started	Monday, 23 December 2024, 5:33 PM
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Duration	60 days 8 hours

Q1) 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 %)

```c
#include <stdio.h>

int a,b;

int main()
{
    scanf("%d %d",&a,&b);
    a=a%10;
    b=b%10;
    // printf("%d %d",a,b);
    if(a==b)
    {
        printf("true");
    }
    else
    {
        printf("false");
    }
    return 0;
}
```

OUTPUT:

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

Passed all tests! ✓

Q2) 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 %)

```c
#include<stdio.h>

int a,b;

int main()
{
    scanf("%d",&a);
    b=a/2;
    b=b%10;
    if((b==1)||(b==3)||(b==5)||(b==7)||(b==9))
    {
        printf("Weird");
    } else if((a>=2)&&(a<=5))
    {
        printf("Not Weird");
    } else if((a>=6)&&(a<=20))
    {
        printf("Weird");
    } else if(a>20)
    {
        printf("Not Weird");
    }
    return 0;
}
```

OUTPUT:

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

Passed all tests! ✓

Q3) 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 %)

```c
#include <stdio.h>

int a,b,c,r,hyp;

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

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

OUTPUT:

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

Passed all tests! ✓