Week 3 – 1:

--Coding-C-Language Features-Optional.

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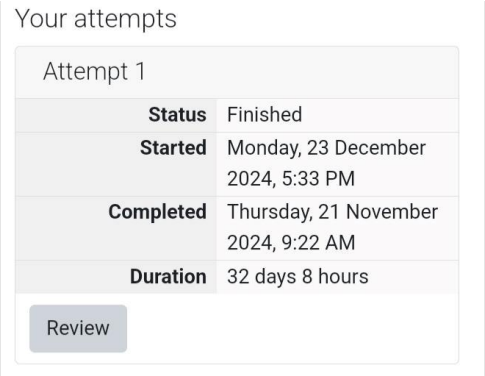

Q1) Write a program to read two integer values and print true if both the numbers end with the same digit, otherwise print false.

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:

```c
#include<stdio.h>
int main()
{
    int a,b,c,d;
    scanf("%d %d",&a,&b);

    c=a%10;
    d=b%10;
    if(c==d)
    printf("true");
    else
    printf("false");
}
```

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:

```c
#include <stdio.h>
int main(){
    int a;
    scanf("%d",&a);
    if (a%2 == 0){
        if (a>=2 && a<=5){
            printf("Not Weird");
        }
        else if (a>=6 && a<=20){
            printf("Weird");
        }
        else if (a>20){
            printf("Not Weird");
        }
    }
    else if (a%2!= 0){
        printf("Weird");
    }
    else{
        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:

```c
#include <stdio.h>
int main(){
    int a,b,c;
    //int ab = a*a+b*b;
    scanf("%d %d %d",&a,&b,&c);
   // int ab = a*a+(b*b);
    if (a>=b && a>=c){
        int ab = b*b + (c*c);
        if (ab == a*a){
            printf("yes");
        }
        else{
            printf("no");
        }
    }
    else if(b>=a && b>=c){
        int ab = a*a+(c*c);
        if (ab == b*b){
            printf("yes");
        }
        else{
            printf("no");
        }
    }
    else if(c>=a && c>=b){
        int ab = a*a+(b*b);
        if (ab == c*c){
            printf("yes");
        }
        else{
            printf("no");
        }
       // printf("yes");
    }
    else{
        printf("no");
    }
    return 0;

}
```

OUTPUT:

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

Passed all tests! ✓