Week 3 – 1:
--decision making and branching
ROLL NO.:240801184
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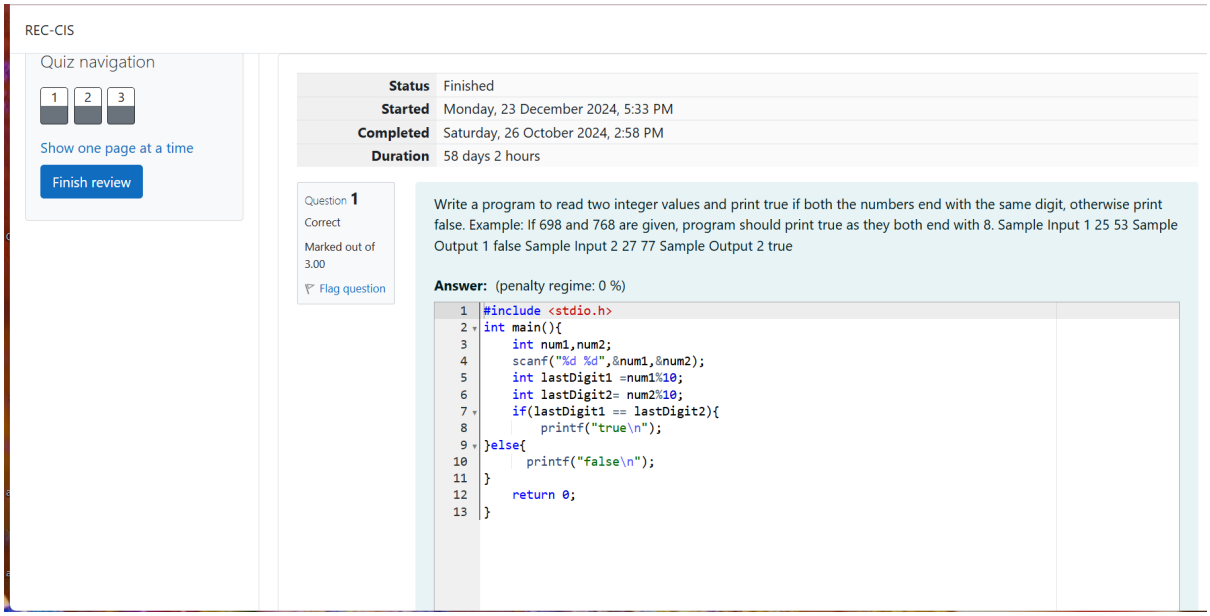
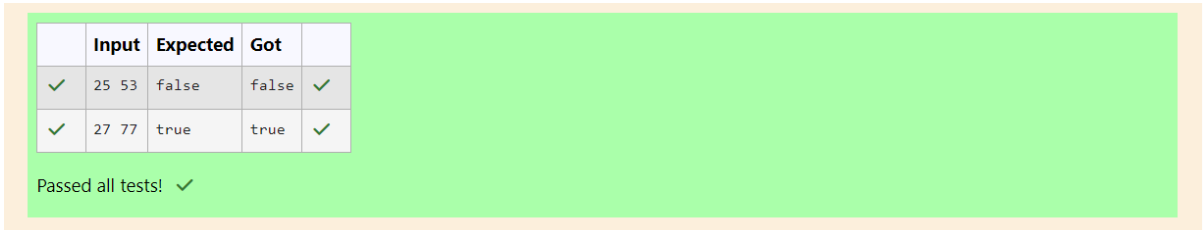
Q1) Write a program to read two integer values and print true if both the numbers end with
the same digit, otherwise print false.
Example: If 698 and 768 are given, program should print true as they both end with 8.
Sample Input 1
25 53
Sample Output 1
false
Sample Input 2
27 77
Sample Output 2
true
Code:



OUTPUT:



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! ✓