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DEPT : ELECTRICAL AND ELETRONICS ENGINEERING

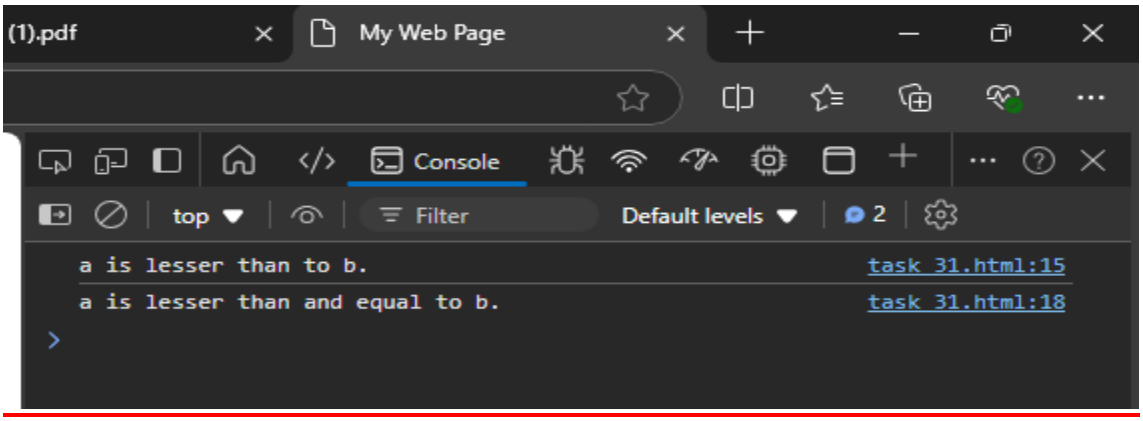
MERN STACK TASK 31-40

TASK 31 : Compare two numbers using relational operators (>, <, >=, <=).

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
           let a = 5, b = 8;
           if(a >= b){
            console.log("a is greater than and equal to b.");
          }
          if(a < b){
            console.log("a is lesser than to b.");
          }
          if(a <= b){
            console.log("a is lesser than and equal to b.");
          }
          if(a > b){
            console.log("a is greater than to b.");
          }
        </script>
    </body>
</html>
```

Output :

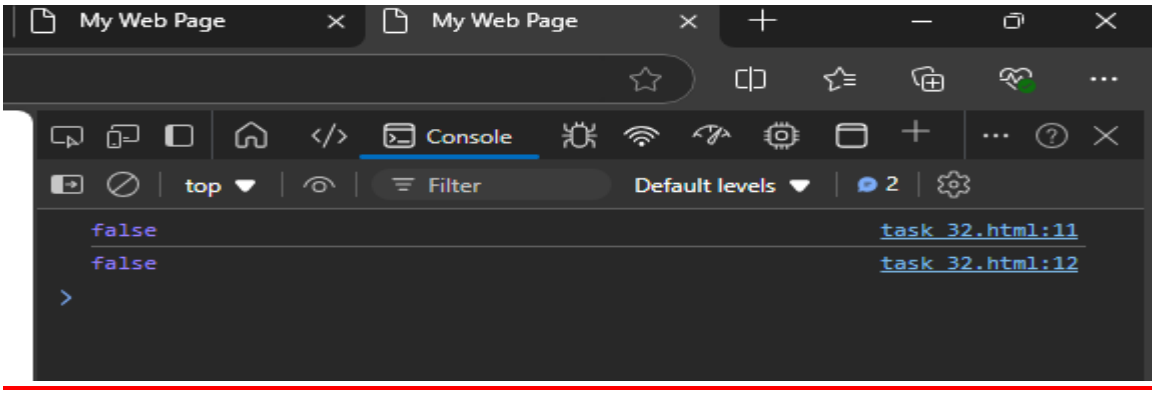


TASK 32 : Use equality () and strict equality (=) operators to compare different data types and note the differences.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
           let a = 5, b = 8;
           console.log(a == b);
           console.log(a === b);
        </script>
    </body>
</html>
```

Output :



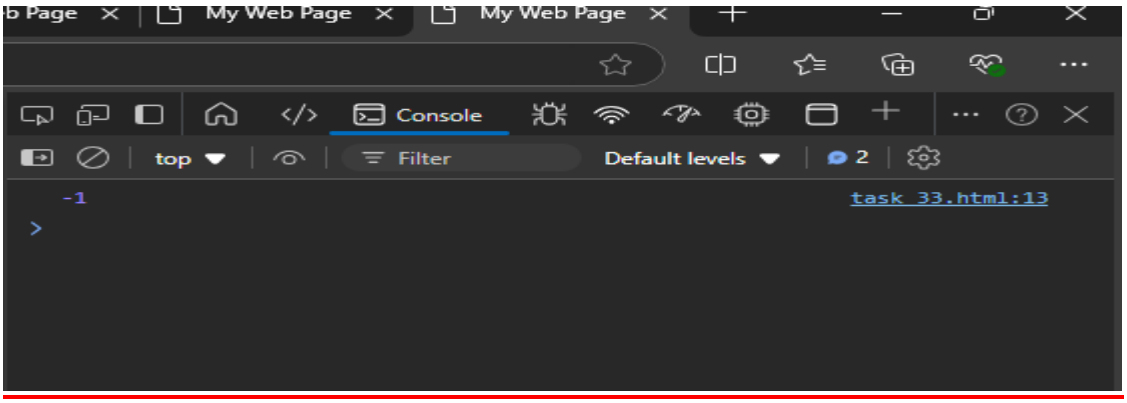
TASK 33 : Compare two strings lexicographically.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
           let str1 = "apple";
           let str2 = "banana";
           let res = str1.localeCompare(str2);
           console.log(res);

        </script>
    </body>
</html>
```

Output :



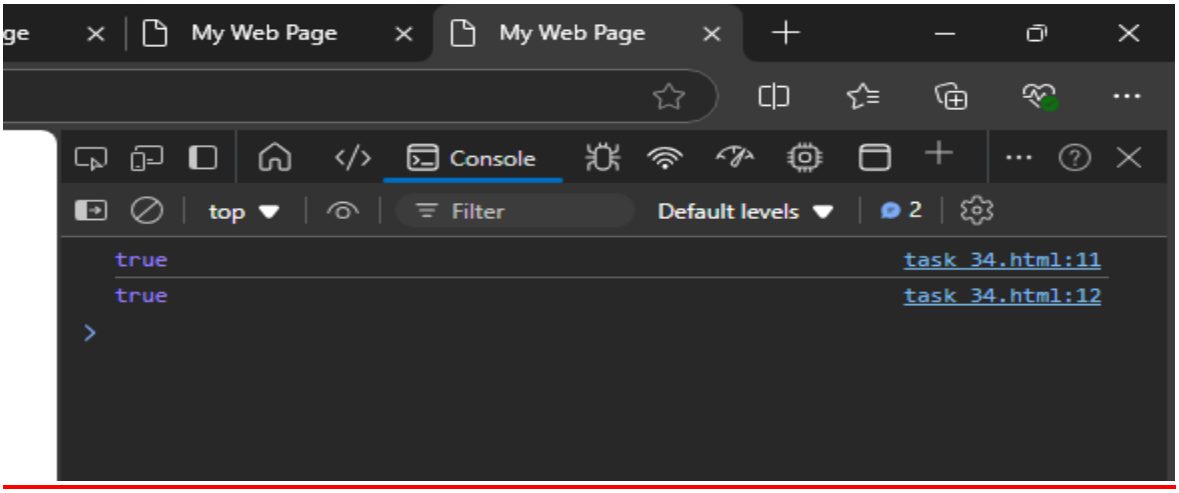
TASK 34 : Use the inequality (!=) and strict inequality (!==) operators to compare values.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
```

```
        </title>
    </head>
    <body>
        <script>
            let a = 5, b = 8;
            console.log(a != b);
            console.log(a !== b);
        </script>
    </body>
</html>
```

Output :

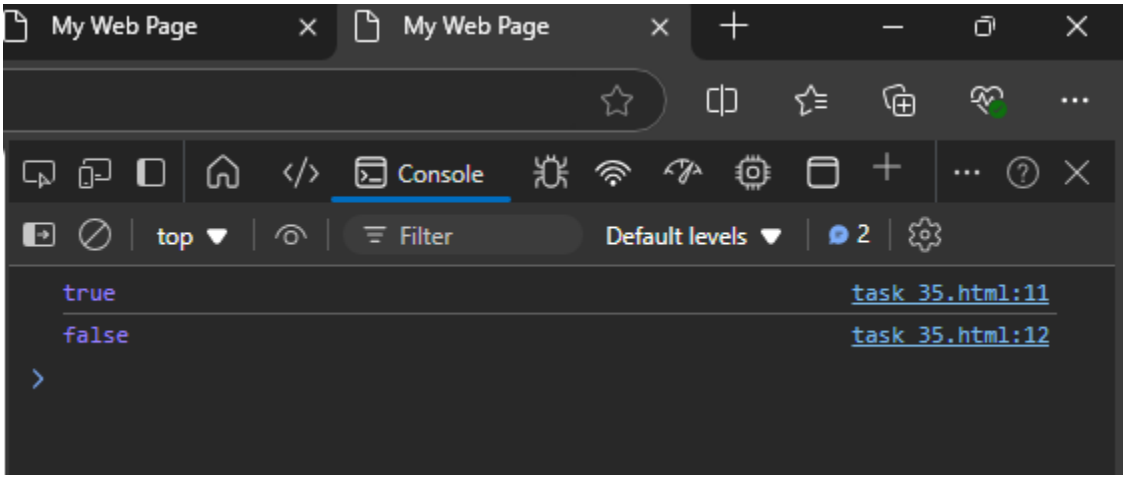


TASK 35 : Compare null and undefined using both == and ===.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
            let a = null, b;
            console.log(a == b);
            console.log(a === b);
        </script>
    </body>
</html>
```

Output :

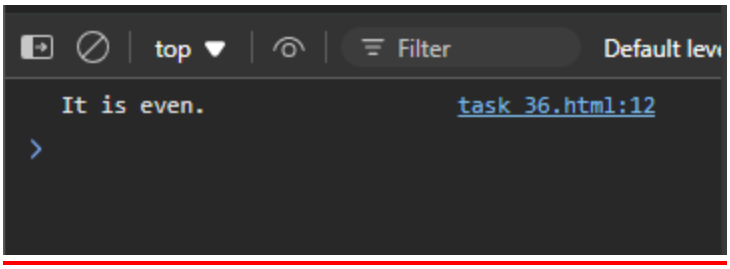


TASK 36 : Write an if statement that checks if a number is even or odd.

Program :

```
<!DOCTYPE html>
<html>
   <head>
       <title>
          My Web Page
       </title>
   </head>
   <body>
       <script>
           let a = 24;
           if(a % 2 == 0){
              console.log("It is even.");
           }
           else{
              console.log("It is odd.");
           }
       </script>
  </body>
</html>
```

Output :

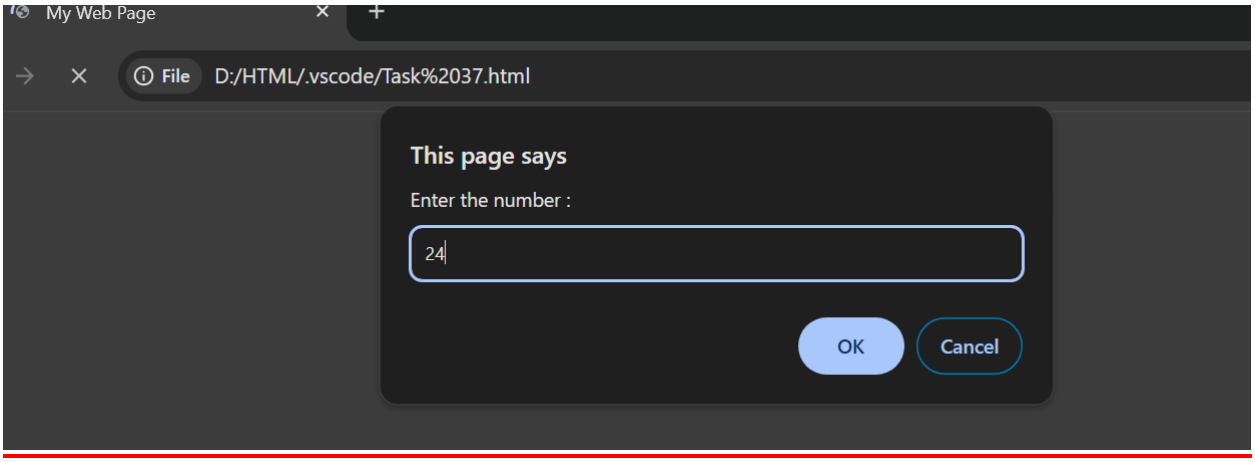


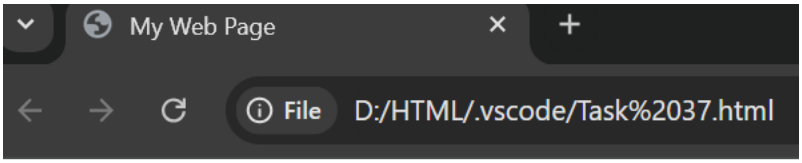
TASK 37 : Use nested if statements to classify a number as negative, positive, or zero.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
            let a =+ prompt("Enter the number : ",0);
            if(a == 0){
                document.writeln(a ," is zero.");
            }else{
                if(a > 0){
                    document.writeln(a ," is positive.");
                }else{
                    document.writeln(a ," is negative.");
                }
            }
        </script>
    </body>
</html>
```

Output :





24 is positive.

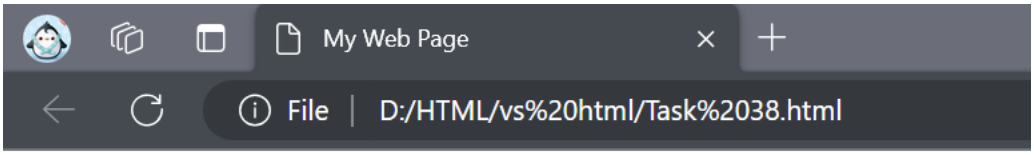
TASK 38: Use the conditional (ternary) operator '?' to rewrite a simple if...else statement.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
            let a = 3, b = 5;
           document.writeln( (a < b)?(a +" is lesser than " +b):(a +" is greater than "+ b));
        </script>
    </body>
```

```
</html>
```

Output :

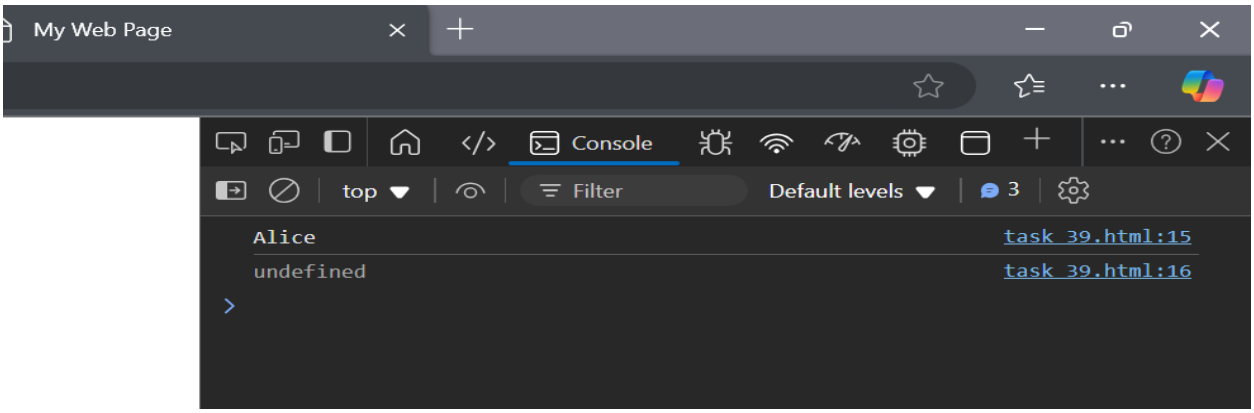


TASK 39 : Check the validity of a variable using the ? operator.

Program :

```
<DOCTYPE html>
    <html>
        <head>
            <title>
                My Web Page
            </title>
        </head>
        <body>
            <script>
                const user = {
                     name: "Alice",
                     address: {
                        city: "Wonderland"
                    } };
                console.log(user?.name);
                console.log(user?.address?.country);
                </script>
        </body>
</html>
```

Output :



TASK 40 : Use the conditional operator to assign a value to a variable based on a condition.

Program :

```
<DOCTYPE html>
    <html>
        <head>
            <title>
                My Web Page
            </title>
        </head>
        <body>
            <script>
                let a = 3, b = 5;
                document.writeln((a < b)? (++a): (++b));
            </script>
        </body>
</html>
```

Output :