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DEPT : ELECTRICAL AND ELETRONICS ENGINEERING

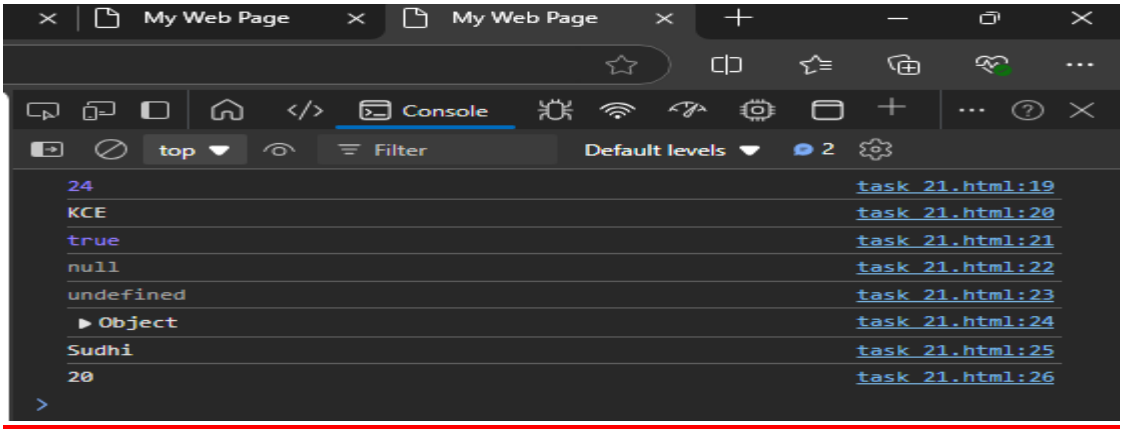
MERN STACK TASK 21-30

TASK 21 : Create variables of different data types (e.g., string, number, boolean, null, undefined, object).

PROGRAM :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
           let a = 24;
           let b = "KCE";
           let c = true;
           let d = null;
           let e ;
           let obj = {
            name : 'Sudhi',
            age : "20",
           } ;
           console.log(a);
           console.log(b);
           console.log(c);
           console.log(d);
           console.log(e);
           console.log(obj);
           console.log(obj.name);
           console.log(obj.age);
        </script>
    </body>
</html>
```

Output :

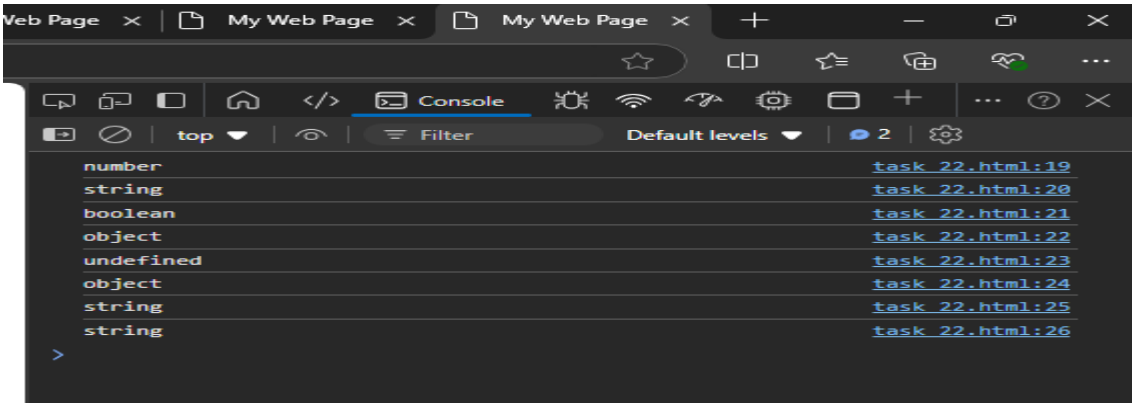


TASK 22 : Use the typeof operator to determine the type of various variables.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
           let a = 24;
           let b = "KCE";
           let c = true;
           let d = null;
           let e ;
           let obj = {
            name : 'Sudhi',
            age : "20",
           } ;
           console.log(typeof(a));
           console.log(typeof(b));
           console.log(typeof(c));
           console.log(typeof(d));
           console.log(typeof(e));
           console.log(typeof(obj));
           console.log(typeof(obj.name));
           console.log(typeof(obj.age));
        </script>
    </body>
</html>
```

Ouput :

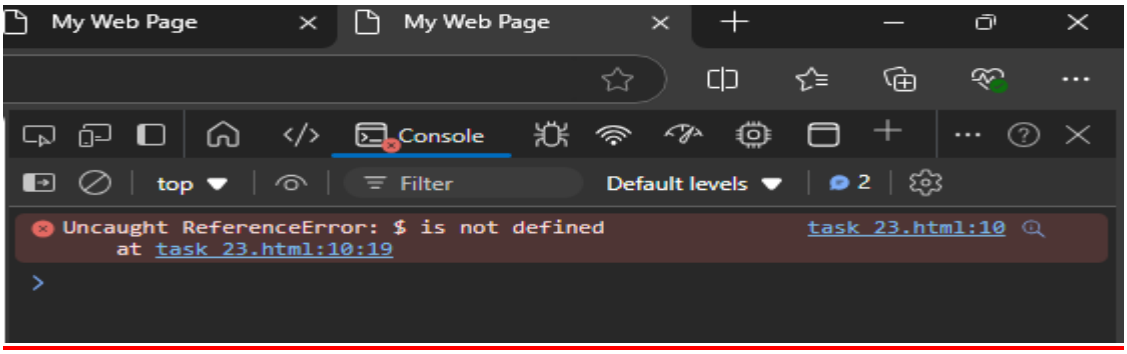


TASK 23 : Declare a symbol and print its type.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
          let d = $;
          console.log(typeof(d));
        </script>
    </body>
</html>
```

Output :

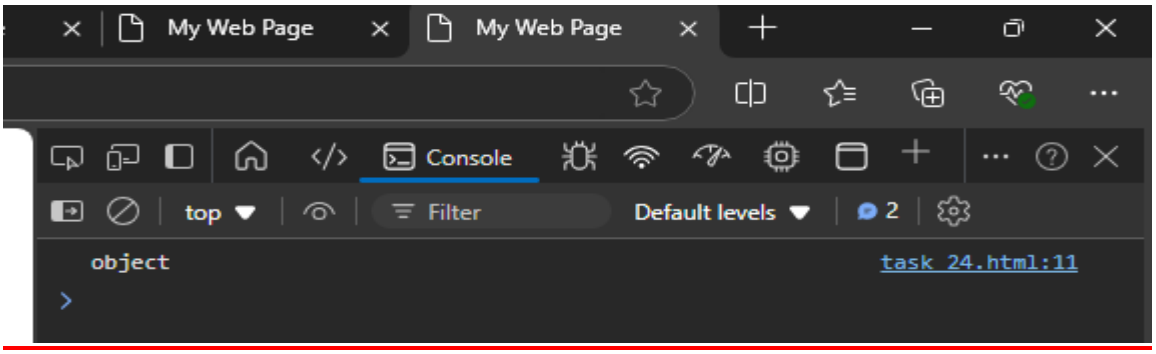


TASK 24 : Assign the value null to a variable and check its type using typeof.

Program :

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

Output :



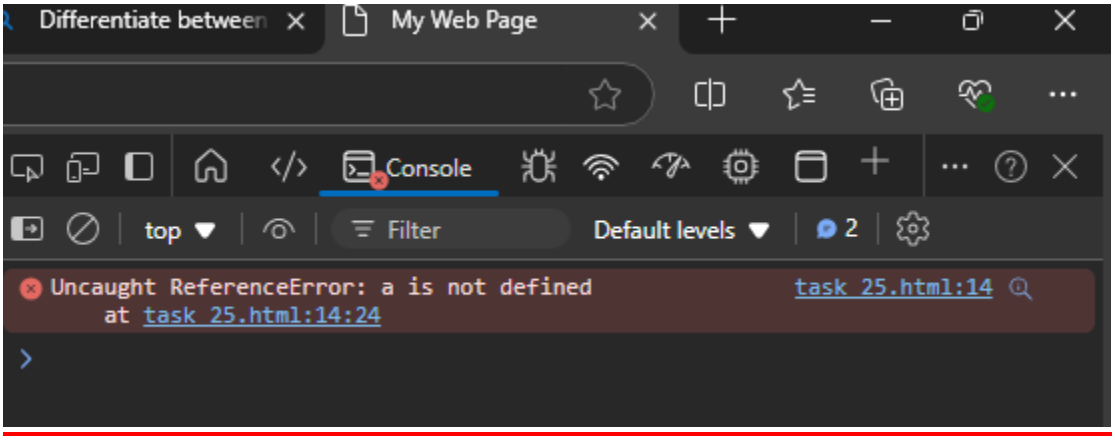
TASK 25 : Differentiate between declaring a variable using var and let in terms of scope.

Program :

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

```
        <script>
          let d = 24;
           if(d > 0){
           let a = 2;
           }
           console.log(a);
           var b = 14;
           if(b > 0){
           var c = 3;
           }
           console.log(c);
        </script>
    </body>
</html>
```

Output :



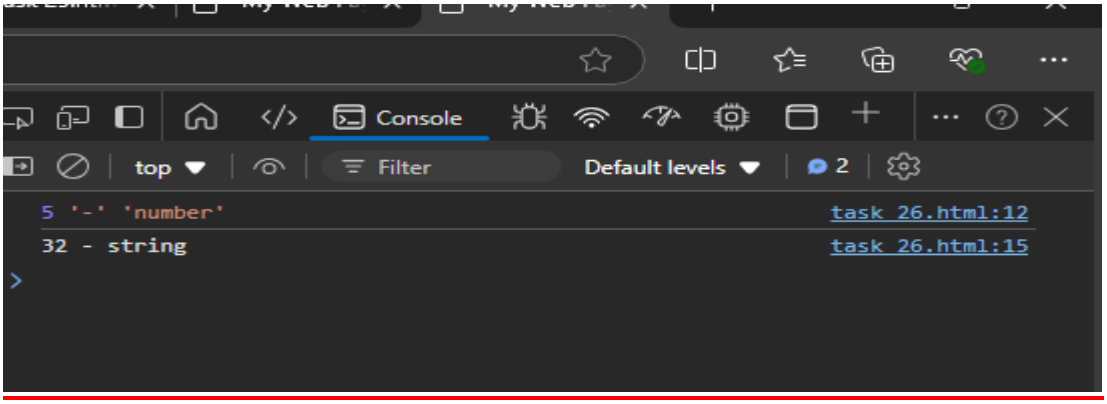
TASK 26 : Convert a string to a number using both implicit and explicit conversion.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
           let result;
           result = Number("5");
           console.log(result, '-', typeof(result));
           let res;
```

```
            res = "3" + 2;
            console.log(res, "-", typeof(res));
        </script>
    </body>
</html>
```

Output :

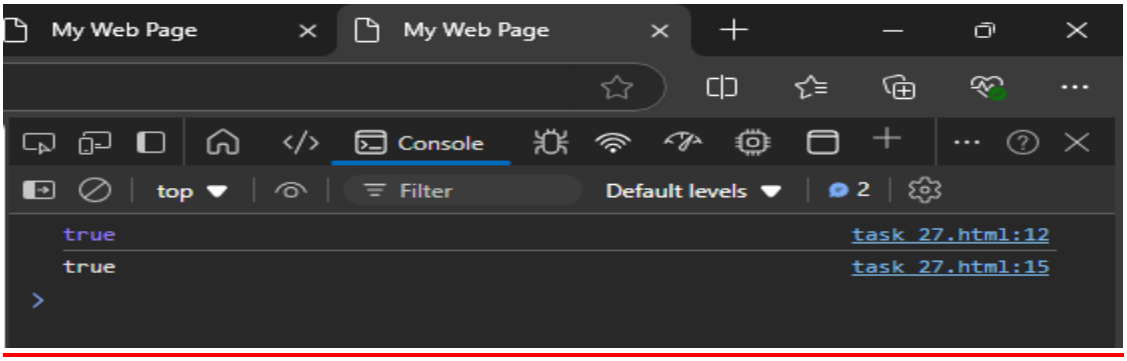


TASK 27 : Convert a boolean to a string and vice versa.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
            let a = "kce";
            let result = (a === "kce");
            console.log(result);
            let b = true;
            let res = b.toString(b);
            console.log(res);
        </script>
    </body>
</html>
```

Output :

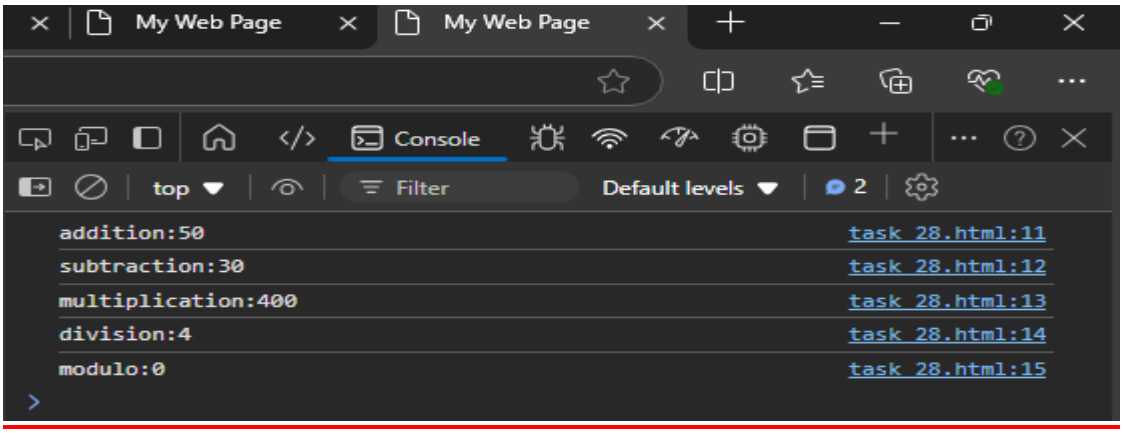


TASK 28 : Practice basic arithmetic operators (+, -, *, /, %).

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
           let a=40,b=10;
            console.log("addition:"+(a+b));
            console.log("subtraction:"+(a-b));
            console.log("multiplication:"+(a*b));
            console.log("division:"+(a/b));
            console.log("modulo:"+(a%b));
        </script>
    </body>
</html>
```

Output :

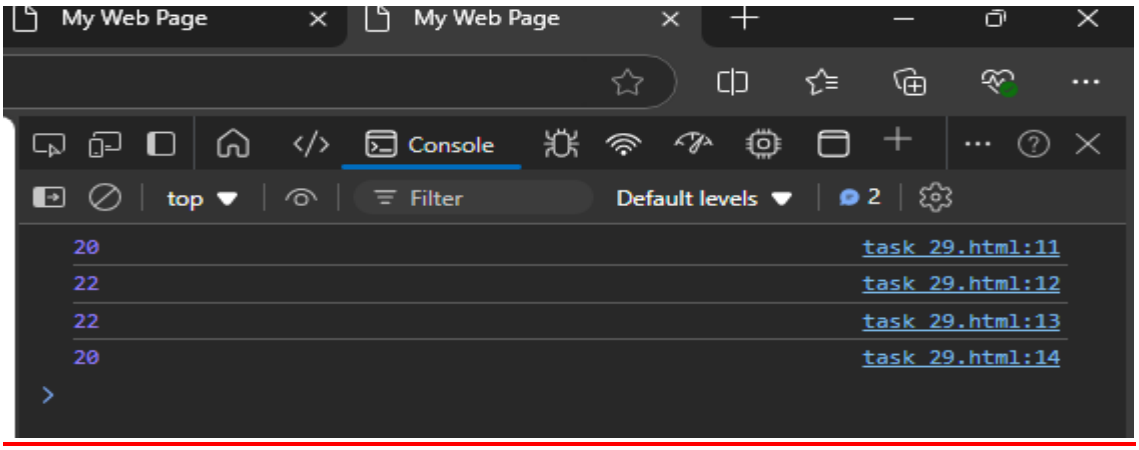


TASK 29 : Practice basic arithmetic operators (+, -, *, /, %).

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
           let a=20;
            console.log(a++);
            console.log(++a);
            console.log(a--);
            console.log(--a);
        </script>
    </body>
</html>
```

Output :



TASK 30 : Explore the precedence of operators by combining multiple operators in a single expression.

Program :

```
<!DOCTYPE html>
<html>
    <head>
```

```
        <title>
            My Web Page
        </title>
    </head>
    <body>
        <script>
           var a = 4;
           var res =+ a++ + ++a;
           console.log(res);
        </script>
    </body>
</html>
```

Output :