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DEPT : Electronics and TeleCommunication Engineering

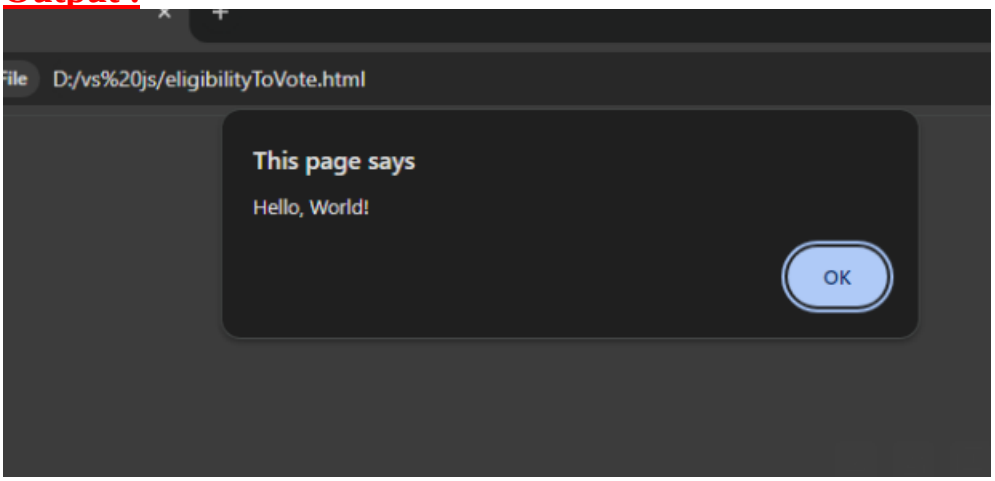
MERN STACK TASK(Q1-Q10)

TASK 1: Write a simple script that displays “Hello, World!” on the web page using an alert box.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            hi
        </title>
    </head>
<body>
    <h1>
        Hello Everyone!!!!!
    </h1>
    <script>
        alert("Hello, World!");
    </script>
</body>
</html>
```

Output :



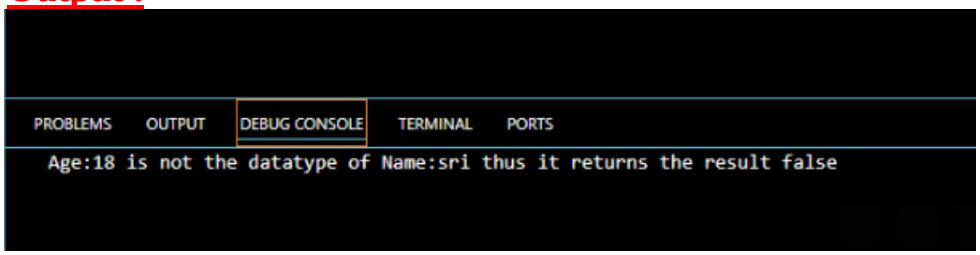
TASK 2 : Experiment with different data types in JavaScript (e.g., string, number, boolean) by declaring and logging them in the console.

Program :

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

```
    <head>
        <title>
            hi
        </title>
    </head>
<body>
    <h1>
        Sri Nithyasri-717823T153
    </h1>
    <script>
        let age=18;//integer
        let name="sri";//string
        var result=(typeof(age)==typeof(name));
        document.writeln(result);//boolean
        console.log("Age:"+age+ " is not the datatype of Name:"+name +"
thus it returns the result " +result);
    </script>
</body>
</html>
```

Output :



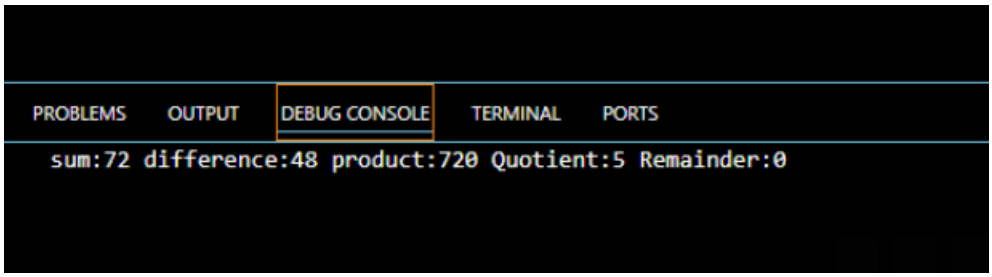
TASK 3: Use the console to perform basic math operations like addition, subtraction, multiplication, and division.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            hi
        </title>
    </head>
<body>
    <h1>
        Sri Nithyasri-717823T153
  </h1>
    <script>
        let a=60;
        let b=12;
```

```
        console.log("sum:"+ (a+b) + " difference:" + (a-b) + " product:" +
(a*b) + " Quotient:" + (a/b) + " Remainder:" + (a%b));
    </script>
</body>
</html>
```

Ouput :

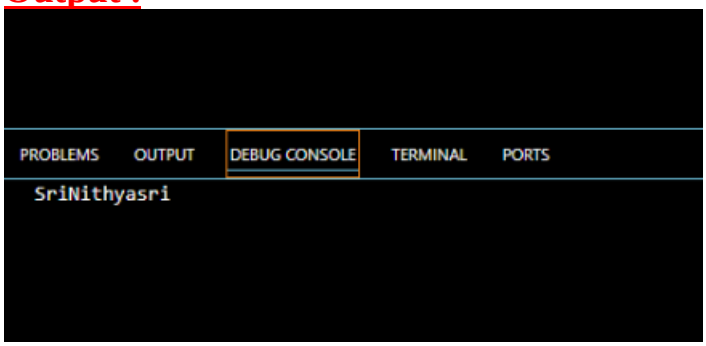


TASK 4: Declare two strings and concatenate them using the + operator.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            hi
        </title>
    </head>
<body>
    <h1>
        Sri Nithyasri-717823T153
    </h1>
    <script>
        let name="Sri";
        let name1="Nithyasri";
        console.log(name+name1);
    </script>
</body>
</html>
```

Output :



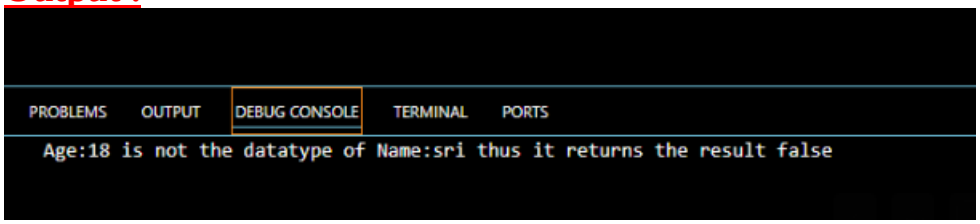
TASK 5 : Use the typeof operator to check the data type of various variables.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            hi
        </title>
    </head>
<body>
    <h1>
        Sri Nithyasri-717823T153
```

```
    </h1>
    <script>
        let age=18;//integer
        let name="sri";//string
        var result=(typeof(age)==typeof(name));
        document.writeln(result);//boolean
        console.log("Age:"+age+ " is not the datatype of Name:"+name +"
thus it returns the result " +result);
    </script>
</body>
</html>
```

Output :



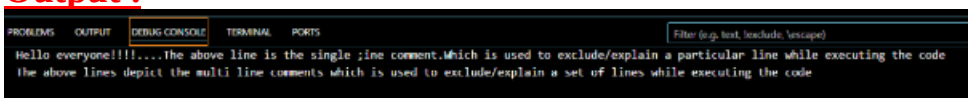
TASK 6: Write a multi-line JavaScript comment and a single-line comment. Explain the difference.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            hi
        </title>
    </head>
<body>
    <h1>
        Sri Nithyasri-717823T153
    </h1>
    <script>
        //this is a single line comment
        console.log("Hello everyone!!!!....The above line is the single ;ine
comment.Which is used to exclude/explain a particular line while executing
the code");
        /*this is a multi
        line
        comment*/
        console.log("The above lines depict the multi line comments which is
used to exclude/explain a set of lines while executing the code");
    </script>
```

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

Output :

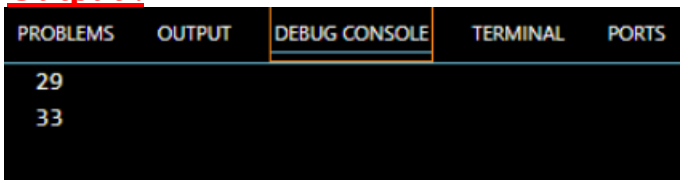


TASK 7: Create a script with both semicolon-separated and not separated lines. Note any differences in behavior.

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            hi
        </title>
    </head>
<body>
    <h1>
        Sri Nithyasri-717823T153
    </h1>
    <script>
        //script with semicolon->runs comparatively faster
        let a=14;
        let b=15;
        let sum=(a+b);
        console.log(sum);
    </script>
    <script>
         //script without semicolon->takes more time to run
         let c=18
         let d=15
         let sum1=(c+d)
         console.log(sum1)
      </script>
</body>
</html>
```

Output :

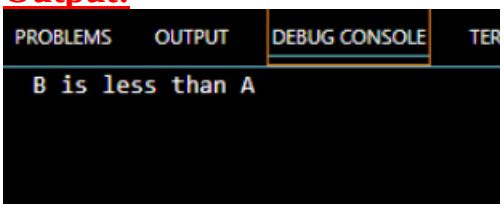


TASK 8: Use proper indentation to format a nested loop.

Program :

```
<!DOCTYPE html>
<html>
   <head>
      <title>
         hi
      </title>
   </head>
<body>
   <h1>
     Sri Nithyasri-717823T153
   </h1>
   <script>
     let a=90;
     let b=80;
     if(a<=b){
       if(a<b){
          console.log("A is less than B");
       }
       else{//a=b
        console.log("Both A and B are equal");
       }
        }
        else{
          console.log("B is less than A");
        }
    </script>
</body>
</html>
```

Output:

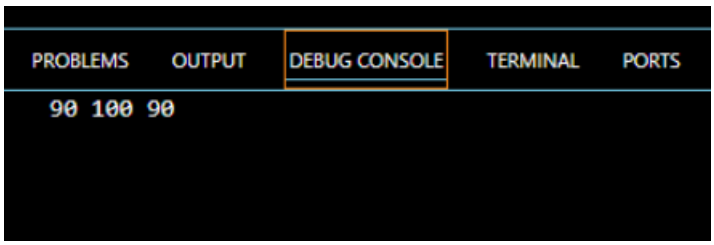


TASK 9: Declare multiple variables in a single line

Program :

```
<!DOCTYPE html>
<html>
    <head>
        <title>
            hi
        </title>
    </head>
<body>
    <h1>
        Sri Nithyasri-717823T153
    </h1>
    <script>
      let a=90,b=100,c=90;
      console.log(a,b,c);
     </script>
</body>
</html>
```

Output :



TASK 10: Place a script tag at the top and bottom of an HTML document. Note any differences in behavior.

Program :

```
<!DOCTYPE html>
<script>
<html>
    <head>
        <title>
            hi
        </title>
    </head>
<body>
    <h1>
        Sri Nithyasri-717823T153
    </h1>
      let a=90;
      console.log(a);
</body>
</html>
</script>
```

Output :