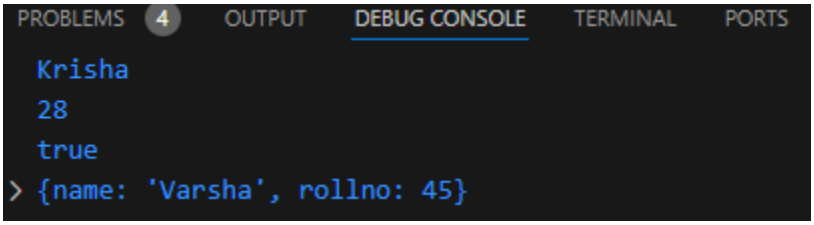
Roll no: 717822P128
Name: Krisha C S

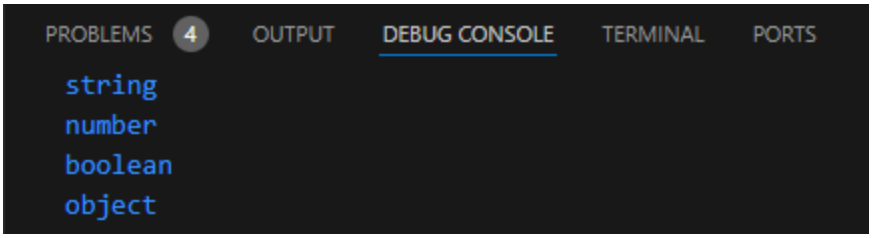
Task 21:
Create variables of different data types (e.g., string, number, boolean, null, undefined, object)

```
<html>
   <haed>
      <title>Task 21</title>
   </haed>
   <body>
      <script>
         let name = "Krisha";
         let rollno = 28;
         let state = true;
         let user={
            name: "Varsha",
            rollno: 45
         };
         console.log(name);
         console.log(rollno);
         console.log(state);
         console.log(user);
      </script>
   </body>
</html>
```



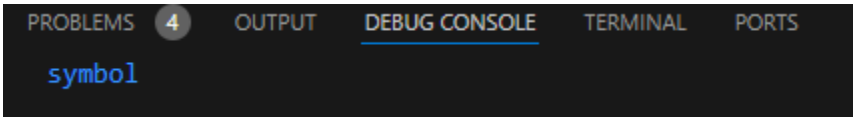
Task 22:
Use the typeof operator to determine the type of various variables.

```
<html>
   <haed>
      <title>Task 22</title>
   </haed>
   <body>
      <script>
         let name = "Krisha";
         let rollno = 28;
         let state = true;
         let user={
            name: "Varsha",
            rollno: 45
         };
         console.log(typeof(name));
         console.log(typeof(rollno));
         console.log(typeof(state));
         console.log(typeof(user));
      </script>
   </body>
</html>
```



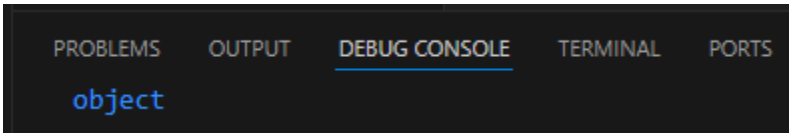
Task 23:
Declare a symbol and print its type

```
<html>
  <head>
    <title>Task 23</title>
  </head>
  <body>
    <script>
      let sym = Symbol();
      console.log(typeof(sym));
    </script>
  </body>
</html>
```



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

```
<html>
  <head>
    <title>Task 24</title>
  </head>
  <body>
    <script>
      var num = null;
      console.log(typeof(num));
    </script>
  </body>
</html>
```



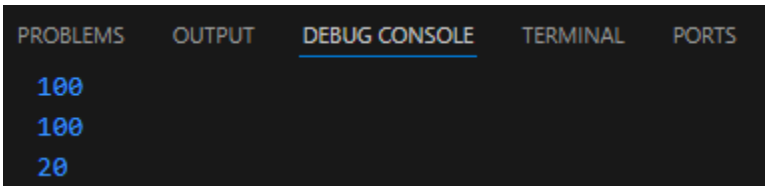
Task 25:
Differentiate between declaring a variable using var and let in terms of scope.

- Variables declared by let are only available inside the block where they're defined.
- Variables declared by var are available throughout the function in which they're declared.

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

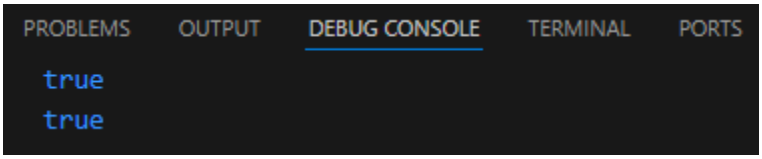
```
<html>
  <head>
    <title>Task 26</title>
  </head>
  <body>
```

```
        <script>
            var num = "100";
            var num1 = 20;
            console.log(+num);
            console.log(Number(num));
            console.log(num1.toString());
        </script>
    </body>
</html>
```



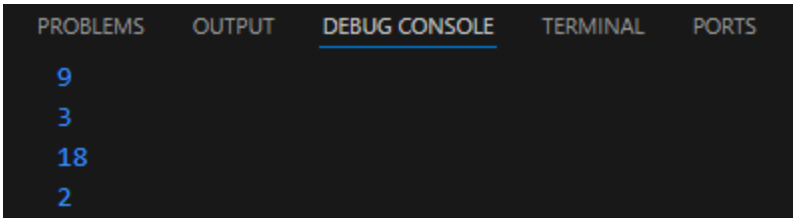
Task 27:
Convert a boolean to a string and vice versa.

```
<html>
    <head>
        <title>Task 27</title>
    </head>
    <body>
        <script>
            let bool = true;
            let s = "true";
            console.log(bool.toString());
            console.log(Boolean(s));
        </script>
    </body>
</html>
```



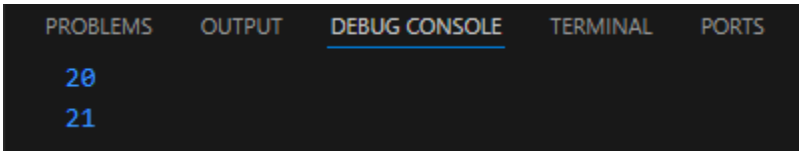
Task 28:
Practice basic arithmetic operators (+, -, *, /, %).

```
<html>
    <head>
        <title>Task 28</title>
    </head>
    <body>
        <script>
            let a = 6;
            let b = 3;
            console.log(a+b);
            console.log(a-b);
            console.log(a*b);
            console.log(a/b);
        </script>
    </body>
</html>
```



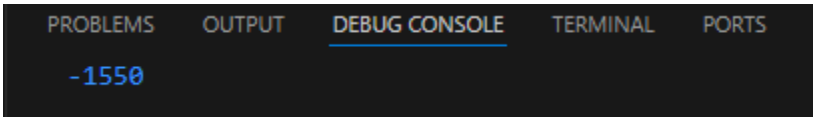
Task 29:
Use the ++ and -- operators on a numeric variable.

```
<html>
   <head>
      <title>Task 24</title>
   </head>
   <body>
      <script>
         var num = 20;
         console.log(num++);
         console.log(num--);
      </script>
   </body>
</html>
```



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

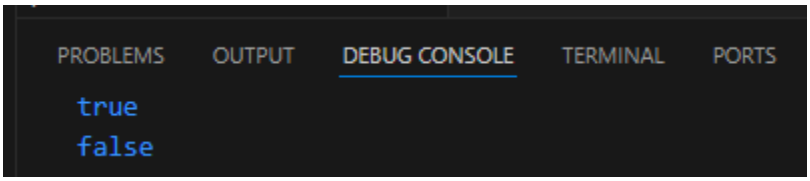
```
<html>
   <head>
      <title>Task 30</title>
   </head>
   <body>
      <script>
         var n1= 20;
         var n2= 30;
         var n3= 40;
         var n4= 40;
         console.log(n1+ n2 - n3 * n4);

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



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

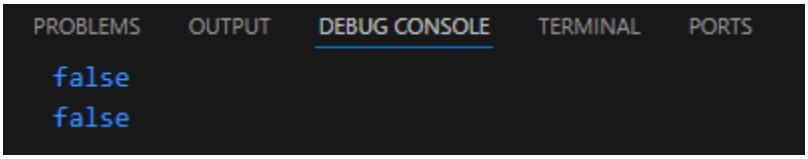
```
<html>
   <head>
      <title>Task 31</title>
   </head>
   <body>
      <script>
```

```
        var n1= 20;
        var n2= 30;
        console.log(n1<n2);
        console.log(n1==n2);
    </script>
  </body>
</html>
```



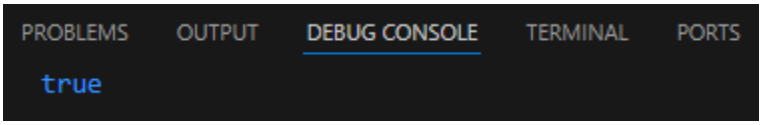
Task 32:
Use equality () and strict equality (=) operators to compare different data types and note the differences.

```
<html>
  <head>
    <title>Task 32</title>
  </head>
  <body>
    <script>
      var n1= 20;
      var n2= 30;
      console.log(n1==n2);
      console.log(n1===n2);
    </script>
  </body>
</html>
```



Task 33:
Compare two strings lexicographically.

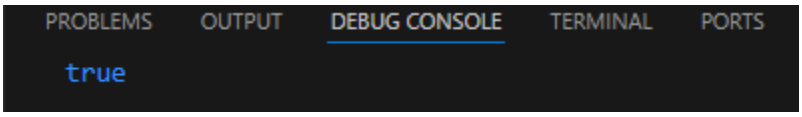
```
<html>
  <head>
    <title>Task 33</title>
  </head>
  <body>
    <script>
      var n1= "Apple";
      var n2= "Banana";
      console.log(n1<n2);
    </script>
  </body>
</html>
```



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

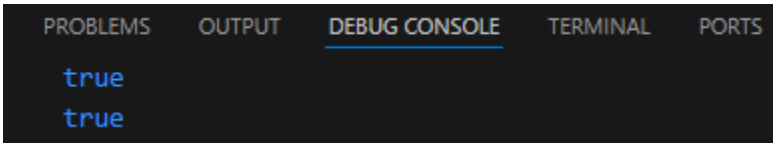
```
<html>
  <head>
```

```
    <title>Task 32</title>
  </head>
  <body>
    <script>
      var n1= 20;
      var n2= 30;
      console.log(n1!=n2);
      console.log(n1!==n2);
    </script>
  </body>
</html>
```



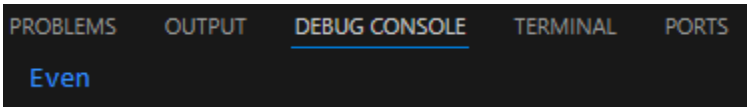
Task 35:
Compare null and undefined using both == and ===.

```
<html>
  <head>
    <title>Task 35</title>
  </head>
  <body>
    <script>
      var s1 = null;
      var s2 = undefined;
      console.log(s1==s2);
      console.log(s1==s2);
    </script>
  </body>
</html>
```



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

```
<html>
  <head>
    <title>Task 36</title>
  </head>
  <body>
    <script>
      var s = 50;
      if(s%2 == 0){
        console.log("Even");
      }
      else{
        console.log("Odd");
      }
    </script>
  </body>
</html>
```



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

```
<html>
   <head>
      <title>Task 36</title>
   </head>
   <body>
      <script>
         var s = 50;
         if(s==0){
            console.log("Zero");
         }
         else if( s>0){
            console.log("Positive");
         }
         else{
            console.log("Negative");
         }
      </script>
   </body>
</html>
```