

## The modern mode, "use strict", Variables

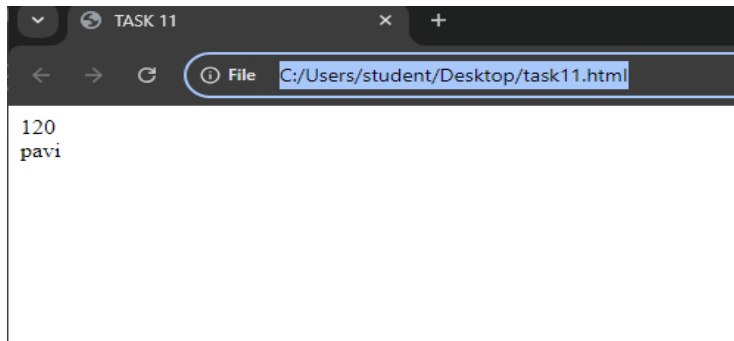
### 1.The modern mode, "use strict":

**Task 11:** Write a script without using "use strict" and try to assign a value to an undeclared variable. Note the result.

Code:

```
<html><head>
<title>TASK 11</title>
</head>
<body>
  </p><script>
    a=100,b=20,name="pavi";
    document.writeln(a+b+"<br>")
    document.writeln(name);
  </script>
</body></html>
```

Output:



**Task 12:** Enable "use strict" mode and repeat the above action, noting the difference

Code:

```
<html><head>
<title>TASK 12</title>
</head>
<body>
  </p><script>
    "use strict";
    a=100,b=20,name="pavi";
    document.writeln(a+b+"<br>")
    document.writeln(name);
  </script>
</body></html>
```

Output:



Difference:

**Strict Mode:** Throws an error if you try to use undeclared variables (e.g., `a = 100;` without `let`, `var`, or `const`).

**Non-strict Mode:** Allows undeclared variables to be automatically created as global variables without throwing an error.

**Task 13:** In “use strict” mode, try to delete a variable, function, or function parameter

Code:

```
<html><head>
<title>TASK 13</title>
</head>
<body>
  </p><script>
    "use strict";
    let a = 10;
    delete a;
    function myFunction() {
      return 5;
    }
    delete myFunction;
    function test(x) {
      delete x;
    }

    test(5);
  </script>
</body></html>
```

Output:

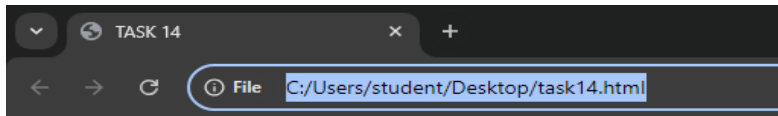


**Task 14:** Assign a value to an undeclared variable without “use strict” and then with “use strict”

Code:

```
<html><head>
<title>TASK 14</title>
</head>
<body>
  </p><script>
    a = 10;
    document.writeln(a);
  </script>
</body></html>
```

Output:



10

```
<html><head>
<title>TASK 14</title>
</head>
<body>
  </p><script>
    "use strict";
    a = 10;
    document.writeln(a);
  </script>
</body></html>
```

Output:



**Task 15:** Declare a variable with a reserved keyword in “use strict” mode.

Code:

```
<html><head>
<title>TASK 15</title>
</head>
<body>
  </p><script>
    "use strict";
    let let=10;
    document.writeln(a);
  </script>
</body></html>
```

Output:



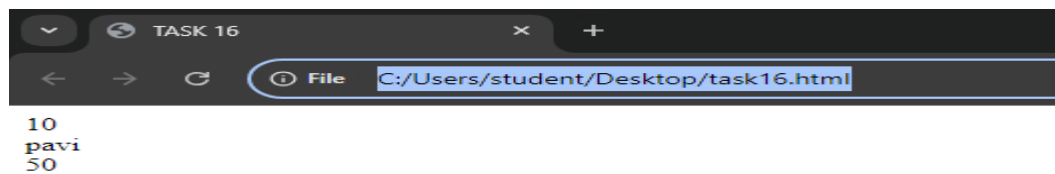
## 2. Variables:

**Task 16:** Declare variables using let, const, and var. Discuss when each should be used.

Code:

```
<html><head>
<title>TASK 16</title>
</head>
<body>
  </p><script>
let a=10;
var name="pavi";
const b=50;
document.writeln(a+"<br>");
document.writeln(name+"<br>");
document.writeln(b+"<br>");
  </script>
</body></html>
```

Output:



Use of let,var,const:

Scope:

let and const: Are limited to the block where they are declared.

var: Is accessible throughout the function or globally if declared outside a function.

Reassignment:

let: Can be reassigned, but cannot be redeclared in the same scope.

const: Cannot be reassigned or redeclared.

var: Can be both reassigned and redeclared in the same scope.

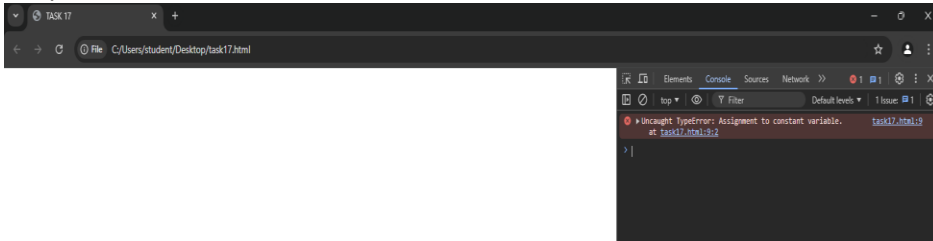
**Task 17:** Attempt to reassign a const variable and observe the result.

Code:

```
<html><head>
<title>TASK 17</title>
</head>
<body>
  </p><script>
let a=10;
var name="pavi";
const b=50;
b=10;
document.writeln(a+"<br>");
document.writeln(name+"<br>");
document.writeln(b+"<br>");
```

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

Output:

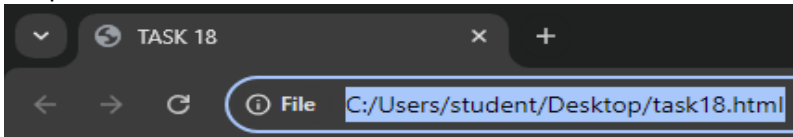


**Task 18:** Declare a variable without initializing it and print its value.

Code:

```
<html><head>
<title>TASK 18</title>
</head>
<body>
  </p><script>
let a;
var name;
document.writeln(a+"<br>");
document.writeln(name+"<br>");
//document.writeln(b+"<br>");
  </script>
</body></html>
```

Output:



```
<html><head>
<title>TASK 18</title>
</head>
<body>
  </p><script>
let a;
var name;
const b;
document.writeln(a+"<br>");
document.writeln(name+"<br>");
document.writeln(b+"<br>");
  </script>
</body></html>
```

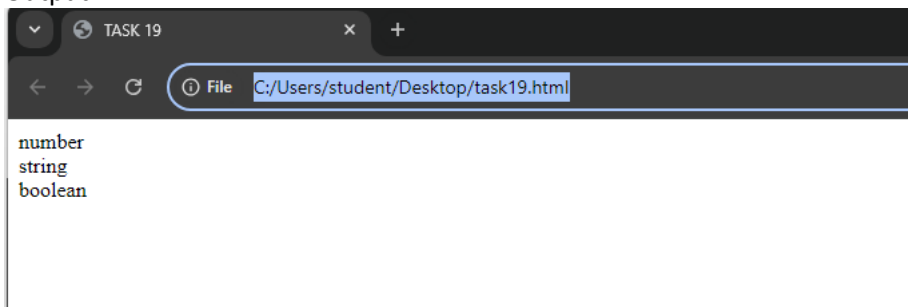
Output:



**Task 19:** Assign a number, string, and boolean value to a variable and print its type using typeof  
Code:

```
<html><head>
<title>TASK 19</title>
</head>
<body>
  </p><script>
let a=10;
var name="hi";
const b=true;
document.writeln(typeof(a)+"<br>");
document.writeln(typeof(name)+"<br>");
document.writeln(typeof(b)+"<br>");
  </script>
</body></html>
```

Output:



**Task 20:** Rename a variable and observe the outcome.

Code:

```
<html><head>
<title>TASK 20</title>
</head>
<body>
  </p><script>
let a=10;
var name="hi";
const b=true;
let c=a;
var name1=name;
const d=b;
document.writeln(c+"<br>");
document.writeln(name1+"<br>");
document.writeln(d+"<br>");
  </script>
```

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

Output:

