```
41.<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
        <meta name ="viewport" content="width=device-width,initial-scale=1">
        <title> document</title>
    </head>
<body>
    <script>
let a = true;
let b = false;
let x = 0;
let y= 20;

console.log("a="+a);
console.log("b="+b);
console.log("x="+x);
console.log("y="+y);

console.log(a && b);
console.log(x && y);


console.log(a || b);
console.log(x || y);


console.log(!a);
console.log(!b);
console.log(a && (x || y));
console.log(!(a && b));
console.log(!(a || b));

</script>
</body>
</html>
```
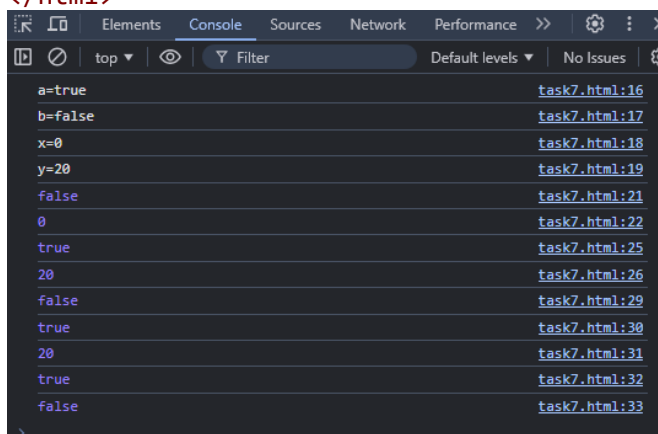
Elements	Console	Sources	Network	Performance >>	⚙ ⋮ ✕

▣ ⊘ | top ▾ | ⊙ | ▽ Filter | Default levels ▾ | No Issues | ⚙

a=true	task7.html:16
b=false	task7.html:17
x=0	task7.html:18
y=20	task7.html:19
false	task7.html:21
0	task7.html:22
true	task7.html:25
20	task7.html:26
false	task7.html:29
true	task7.html:30
20	task7.html:31
true	task7.html:32
false	task7.html:33

42.

```html
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
        <meta name ="viewport" content="width=device-width,initial-scale=1">
        <title> document</title>
    </head>
<body>
    <script>
let num = +parseInt(prompt("enter a number"));
let low = 10;
let high = 30;
console.log("num="+num);
console.log("low="+low);
console.log("high="+high);
if (num >= low && num <= high) {
  console.log("The number is within the range.");
} else {
  console.log("The number is out of the range.");
}

</script>
</body>
</html>
```
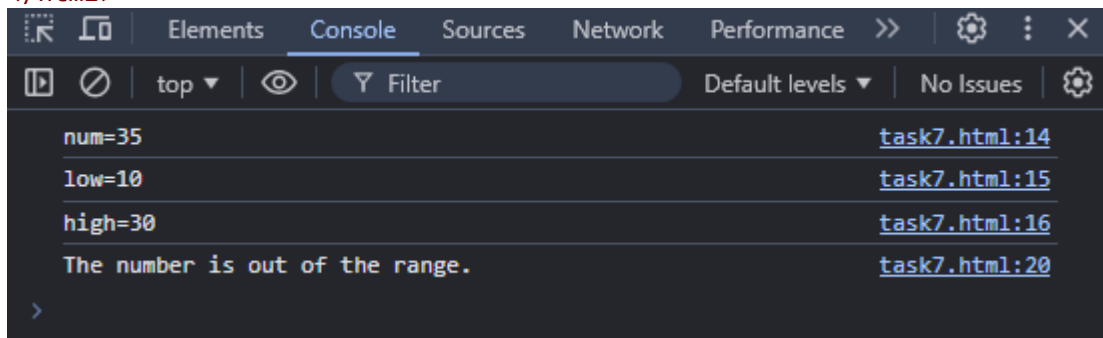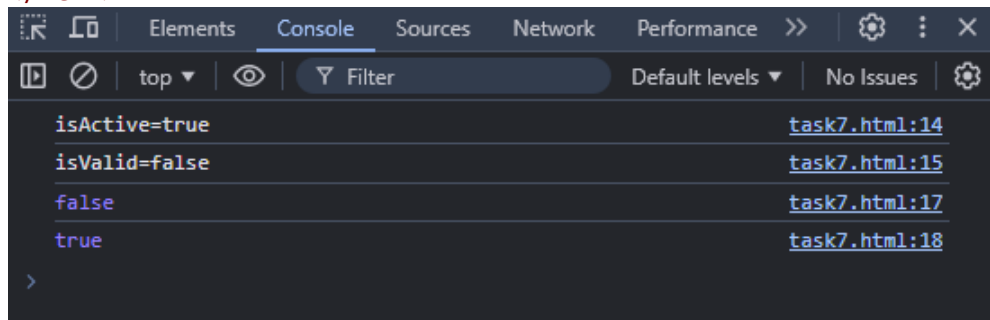
Elements	Console	Sources	Network	Performance	>>		⋮	X

top ▼	👁	Filter	Default levels ▼	No Issues	⚙

num=35	task7.html:14
low=10	task7.html:15
high=30	task7.html:16
The number is out of the range.	task7.html:20

43.

```html
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
        <meta name ="viewport" content="width=device-width,initial-scale=1">
        <title> document</title>
    </head>
<body>
    <script>
let isActive= true;
let isValid = false;
```

```
console.log("isActive="+isActive);
console.log("isValid="+isValid);

console.log(!isActive);
console.log(!isValid);

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

isActive=true		task7.html:14
isValid=false		task7.html:15
false		task7.html:17
true		task7.html:18

```
44.<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
        <meta name ="viewport" content="width=device-width,initial-scale=1">
        <title> document</title>
    </head>
<body>
    <script>
let a = 0;
let b = 5;
let c = 10;

console.log(a && b);
console.log(b && c);

console.log(b || a);
console.log(a || c);


</script>
</body>
</html>
```
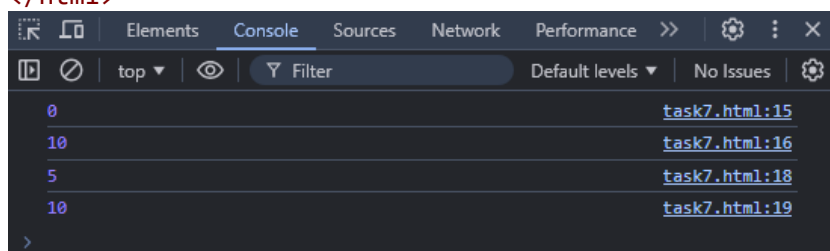
0		task7.html:15
10		task7.html:16
5		task7.html:18
10		task7.html:19

45.

```html
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
        <meta name ="viewport" content="width=device-width,initial-scale=1">
        <title> document</title>
    </head>
<body>
    <script>
let a = "Hello world";
let b = 10;
let c = null;
let d = undefined;

console.log(a && b);
console.log(a && c);
console.log(b || c);
console.log(c || d);


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

10		task7.html:16
null		task7.html:17
10		task7.html:18
undefined		task7.html:19