

Day 3



Conditional expressions in JavaScript:

What are Conditional Expressions in JavaScript?

Conditional expressions are used to make decisions in a program. They allow your code to execute different actions based on conditions (true or false).

Basic Conditional Statements

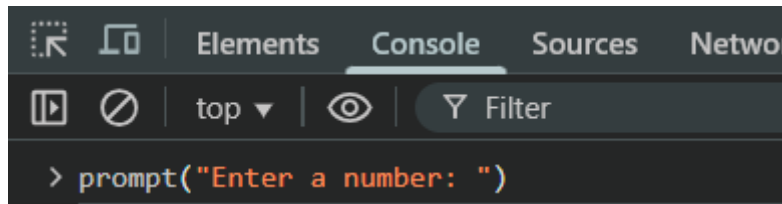
Statement	Description
if	Executes a block of code if a condition is true.
if...else	Executes one block if true, another block if false.
if...else if...else	Tests multiple conditions, runs the first one that's true.
Ternary Operator (?:)	Short form of if...else.
switch	Used to test one value against multiple cases.

Difference Between if and switch

Feature	if / else	switch
Use Case	For range or complex conditions	For fixed, specific values
Data Type	Can compare any expressions	Works best with fixed values
Speed	Slower with many conditions	Faster for fixed comparisons
Example	if (x > 5)	switch(x)

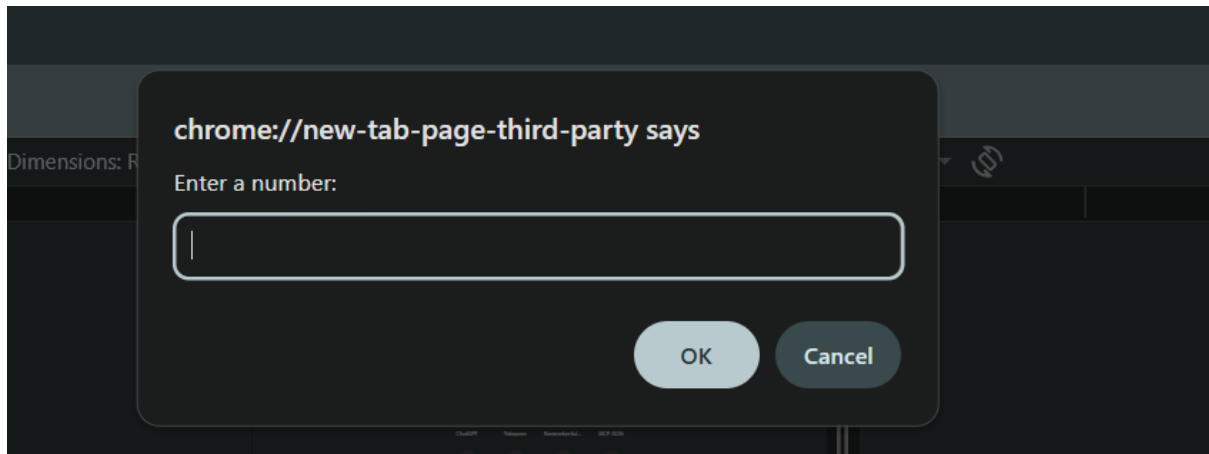
Example: how to take user input? We will use “Prompt” to do so.

Code:

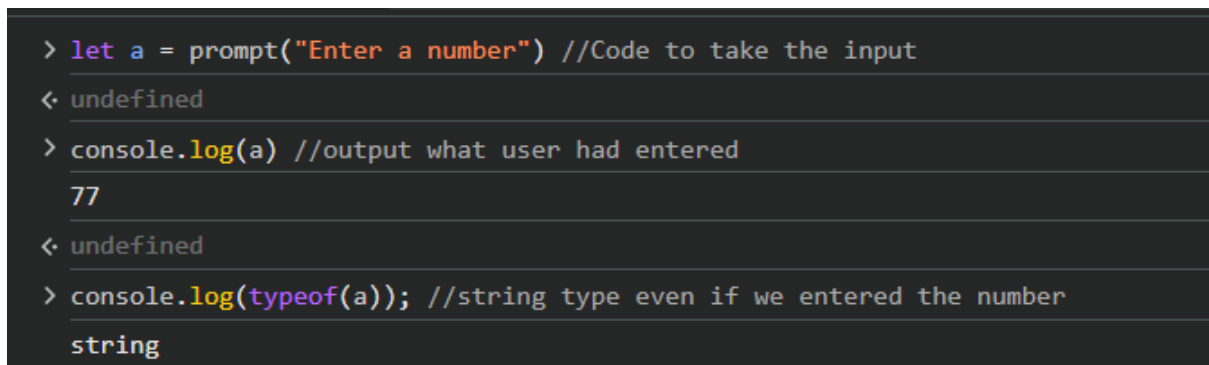


```
> prompt("Enter a number: ")
```

Output:



By default, value entered in the prompt will be treated as a string. We can prove it using the “typeof” as shown below:



```
> let a = prompt("Enter a number") //Code to take the input
< undefined
> console.log(a) //output what user had entered
77
< undefined
> console.log(typeof(a)); //string type even if we entered the number
string
```

Now, we want to convert this string to numeric type then we will use “parseInt” as shown below:

```
> let a = prompt("Enter a number") //Code to take the input
< undefined
> console.log(a) //output what user had entered
77
< undefined
> console.log(typeof(a)); //string type even if we entered the number
string
< undefined
> a = Number.parseInt(a) //converting the value in a to the number
< 77
> console.log(typeof(a)); //number type after the conversion
number
```

Now, coming to the conditionals:

Example: if statement

```
JS main.js > ...
```

```
1 let a = 55;
2 if(a>44){
3     console.log(a);
4 }
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

```
PS E:\JavaScript\Day1-10\Day3> node main.js
55
```

Example: if else statement

```
7 // if else statement
8 let a = 3
9 if(a>4){
10     console.log("yes");
11 }
12 else{
13     console.log("no");
14 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS E:\JavaScript\Day1-10\Day3> node main.js
no

Example: if else if else statement

```
16 //if else if else if statement
17 let a = 3
18 if(a>4){
19     console.log("yes");
20 }
21 else if(a=4){
22     console.log("Your a is 4");
23 }
24 else{
25     console.log("no");
26 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS E:\JavaScript\Day1-10\Day3> node main.js
Your a is 4

Example: ternary operator

```
28 //ternary operator
29 let a = 4;
30 let res = (a>5)? "More than 5" : "Less than 5";
31 console.log(a);
32 console.log(res);
33
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
● PS E:\JavaScript\Day1-10\Day3> node main.js
4
● Less than 5
```

Example: switch and prompt and parseInt

```
> //Switch
let a = prompt("Enter the value of a: ");
a = parseInt(a);
console.log("You entered a as = ", a);
switch(a){
  case 1:
    console.log("One");
    break;
  case 2:
    console.log("Two");
    break;
  default:
    console.log("You entered something more than 2");
}
You entered a as = 2
Two
```