

Course  
&  
Test Series

Introduction to 'JavaScript' Language

Conditional Statements and Looping in JavaScript

Module 2 - Introduction to If Else Statement in JavaScript

 CBSE

if-else Statement

Executes one block of code if the condition is true, and another block of code if the condition is false.

 ICSE

Application of if-else in JavaScript:

The if-else statement in JavaScript is used to execute one block of code when a condition is true and another block of code when the condition is false. It is one of the most commonly used conditional structures in programming, allowing for decision-making in the code.

 NTSE

Syntax:

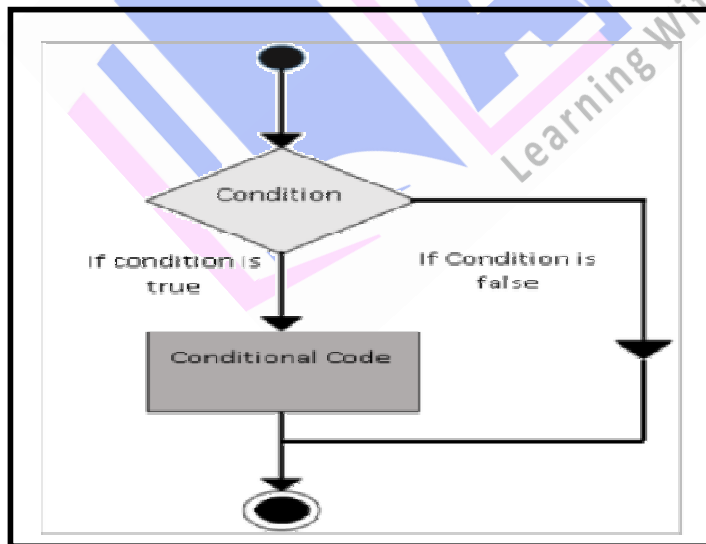
```
if (condition) {
    // Code block executed if the condition is true
} else {
    // Code block executed if the condition is false
}
```

 Banking & Insurance

 Central Govt. Service

Flow Chart of if-else

The following flow chart shows how the if-else statement works.



 State Govt. Services

 LAW Entrance

 MBA Entrance

 Railways & Metro Services

...many more

abhyasonline.in

**Course  
&  
Test Series**

**Introduction to 'JavaScript' Language**

**Solved Example 1: Find Greater Number between Two Numbers**

- Create an HTML document with JavaScript that performs the following actions:
1. Sets the background color of the webpage to light greenish-yellow (hex color: #e7f510).
  2. Declares two variables a and b and assigns the values 60 and 30 to them, respectively.
  3. Displays the values of a and b on the webpage using document.write.
  4. Uses an if-else statement to compare the two variables:
    - o If the value of a is greater than b, displays the message: "Value of a is greater than b".
    - o Otherwise, displays the message: "Value of a is less than b".
  5. Writes the comparison result directly to the webpage using document.write.

**Solution:**

```
<html>
<head>
</head>
<body bgcolor ="e7f510">
<script type="text/javascript">
    var a, b;
    a = 60
    b = 30
    document.write("<br>Value of a = " + a);
    document.write("<br>Value of b = " + b);
    if (a > b) {
        document.write("<br> Value of a is greater than b");
    }
    else {
        document.write("<br> Value of a is less than b");
    }
</script>
</body>
</html>
```

Value of a = 60  
Value of b = 30  
Value of a is greater than b

 **Banking & Insurance**

 **Central Govt. Service**

 **State Govt. Services**

 **LAW Entrance**

 **MBA Entrance**

 **Railways & Metro Services**

**...many more**

**abhyasonline.in**

Solved Example 2: Find Greater among two Numbers Entered by User

- Create an HTML document with JavaScript that performs the following actions:
1. Sets the background color of the webpage to light blue (hex color: #add8e6).
  2. Prompts the user to enter two numbers, a and b, using prompt() dialogs.
  3. Displays the values of a and b on the webpage using document.write.
  4. Uses an if-else statement to compare the two variables:
    - o If the value of a is greater than b, displays the message: "Value of a is greater than b".
    - o Otherwise, displays the message: "Value of a is less than or equal to b".
  5. Writes the comparison result directly to the webpage using document.write.

Solution:

```
<html>
<head>
</head>
<body bgcolor="#add8e6">
  <script type="text/javascript">
    var a = prompt("Enter the value of a:");
    var b = prompt("Enter the value of b:");

    document.write("<br>Value of a = " + a);
    document.write("<br>Value of b = " + b);

    if (a > b) {
      document.write("<br>Value of a is greater than b");
    } else {
      document.write("<br>Value of a is less than or equal to b");
    }
  </script>
</body>
</html>
```

 CBSE

 ICSE

 NTSE

 Banking & Insurance

 Central Govt. Service

 State Govt. Services

 LAW Entrance

 MBA Entrance

 Railways & Metro Services

...many more

abhyasonline.in

Course  
&  
Test Series

Introduction to 'JavaScript' Language

Value of a = 67  
Value of b = 87  
Value of a is less than or equal to b

**User Entered a = 67 and  
b = 87**

 CBSE

 ICSE

 NTSE

 Banking & Insurance

 Central Govt. Service

 State Govt. Services

 LAW Entrance

 MBA Entrance

 Railways & Metro Services

...many more

abhyasonline.in

**Solved Example 3: Check Divisibility of a Number**

Ques: Create an HTML document with embedded JavaScript that prompts the user to enter a number and checks its divisibility by both 3 and 5, as well as individually by 3 and 5. The results should be displayed on the webpage.

**Instructions:**

Prompt the User:

- Use the prompt() function to ask the user to input a number.
- Store the user's input in a variable named num.

Check Divisibility:

- Divisibility by Both 3 and 5:
  - Use an if-else statement to determine if num is divisible by both 3 and 5.
  - If true, display the message: "The number is divisible by both 3 and 5."
  - Otherwise, display: "The number is not divisible by both 3 and 5."
- Divisibility by 5:
  - Use another if-else statement to check if num is divisible by 5.
  - If true, display: "The number is divisible by 5."
  - Otherwise, display: "The number is not divisible by 5."
- Divisibility by 3:
  - Use a separate if-else statement to check if num is divisible by 3.
  - If true, display: "The number is divisible by 3."
  - Otherwise, display: "The number is not divisible by 3."

Display Results:

**Course  
&  
Test Series**




















...many more  
**abhyasonline.in**

**Introduction to 'JavaScript' Language**

Use the document.write() function to display each result on the webpage.

**Example Output:** If the user enters 15, the webpage should display:

The number is divisible by both 3 and 5.  
The number is divisible by 5.  
The number is divisible by 3.

**Solution:**

```
<!DOCTYPE html>
<html>
<head>
  <title>Check Divisibility</title>
</head>
<body bgcolor="#d3d3d3">
  <script type="text/javascript">
    var num = prompt("Enter a number:", ""); // Prompt user for a number

    if (num % 5 === 0 && num % 3 === 0) {
      document.write("The number is divisible by both 5 and 3.");
    } else {
      document.write("The number is not divisible by both 5 and 3.");
    }

    if (num % 5 === 0) {
      document.write(" The number is divisible by 5.");
    } else {
      document.write(" The number is not divisible by 5.");
    }

    if (num % 3 === 0) {
      document.write(" The number is divisible by 3.");
    } else {
      document.write(" The number is not divisible by 3.");
    }
  }
</script>
</body>
</html>
```

The number is not divisible by both 5 and 3. The number is divisible by 5. The number is not divisible by 3.

**OUTPUT: When  
Number Entered is 10**

Course  
&  
Test Series

Introduction to 'JavaScript' Language

Assignment

Ques 1: Age-Based Eligibility for Driving

• Create an HTML document with JavaScript that performs the following actions:

- Sets the background color of the webpage to light green (#90ee90).
- Prompts the user to enter their age.
- Displays the entered age on the webpage using document.write.
- Uses only if-else statements to determine:
  - If the age is 18 or above, display: "You are eligible for a driving license."
  - If the age is less than 18, display: "You are not eligible for a driving license."

Ques 2: Determine Positive and Negative.

• Create an HTML document with JavaScript that performs the following actions:

- Sets the background color of the webpage to light yellow (#ffffe0).
- Prompts the user to enter a number.
- Displays the entered number on the webpage using document.write.
- Uses only if-else statements to check:
  - If the number is greater than 0, display: "The number is positive."
  - If the number is less than 0, display: "The number is negative."
  - If the number is 0, display: "The number is zero."

Ques 3: Check Even or Odd and Divisibility by 7

Create an HTML document with embedded JavaScript that prompts the user to enter a number. The program checks:

If the number is even or odd.  
If the number is divisible by 7.

Instructions:

Prompt the User:

- Use the prompt() function to ask the user to input a number.
- Store the input in a variable named num.

Check Conditions:

- Even or Odd:
  - Use an if-else statement to determine if the number is even ( $\text{num} \% 2 === 0$ ).
  - If true, display: "The number is even."
  - Otherwise, display: "The number is odd."
- Divisibility by 7:

CBSE

ICSE

NTSE

Banking & Insurance

Central Govt. Service

State Govt. Services

LAW Entrance

MBA Entrance

Railways & Metro Services

...many more

abhyasonline.in

Course  
&  
Test Series

Introduction to 'JavaScript' Language

- Use another if-else statement to check if the number is divisible by 7 ( $\text{num \% 7} === 0$ ).
- If true, display: "The number is divisible by 7."
- Otherwise, display: "The number is not divisible by 7."

**Display Results:**

Use the document.write() function to display all results on the webpage.

**Example Output:**

If the user enters 14:  
The number is even.  
The number is divisible by 7.

 CBSE

 ICSE

 NTSE

 Banking & Insurance

 Central Govt. Service

 State Govt. Services

 LAW Entrance

 MBA Entrance

 Railways & Metro Services

...many more

abhyasonline.in

