

```
// console.log("Conditional Statement");  
// conditional statements: it is used to  
control the flow of program.
```

```
/*
```

1. if statement: Use if to specify a block of code to be executed, if a specified condition is true.

***Syntax:->**

```
if (condition) {  
    // block of code to be executed if the  
condition is true  
}
```

***Note:->**

that if is in lowercase letters. Uppercase letters (If or IF) will generate a JavaScript error.

***Example 1:**

Q:Make a "Good day" greeting if the hour is less than 18:00:

```
if (hour < 18) {  
    greeting = "Good day";  
}  
ans-> Good day  
*/  
console.log("Example of if statements");  
//example 2 of if codn:  
let n = 15;  
if (n >= 10) {  
    console.log("true");  
}  
  
//example 1 of if codn:  
let age = 21;  
if (age >= 18) {  
    console.log("person is eligible to  
vote");  
}  
  
/*
```

2. The else Statement :

Use the else statement to specify a block of code to be executed if the condition is false.

*Syntax:->

```
if (condition) {  
    // block of code to be executed if the  
    condition is true  
} else {  
    // block of code to be executed if the  
    condition is false  
}
```

*Example 1:

Q : If the hour is less than 18, create a "Good day" greeting, otherwise "Good evening":

```
if (hour < 18) {  
    greeting = "Good day";  
} else {  
    greeting = "Good evening";  
}
```

ans:-> Good day

*/

```
console.log("Example of else statements");
```

//example 1 of else codn:

```
let num = 4;
if (num % 2 == 0) {
  console.log("even");
} else {
  console.log("odd");
}
```

//example 2 of else codn:

```
let num1 = 5;
if (num1 % 2 == 0) {
  console.log("even");
} else {
  console.log("odd");
}
```

/*

3. The else if Statement :->

Use the else if statement to specify a new condition if the first condition is false.

*Syntax :->

```
if (condition1) {
```

```
// block of code to be executed if
condition1 is true
} else if (condition2) {
    // block of code to be executed if the
    condition1 is false and condition2 is true
} else {
    // block of code to be executed if the
    condition1 is false and condition2 is false
}
```

Example:->

Q: If time is less than 10:00, create a "Good morning" greeting, if not, but time is less than 20:00, create a "Good day" greeting, otherwise a "Good evening":

```
if (time < 10) {
    greeting = "Good morning";
} else if (time < 20) {
    greeting = "Good day";
} else {
    greeting = "Good evening";
}
```

The result of greeting will be:

Good day

*/

```
console.log("Example of else if  
statements");
```

```
//compare 2 numbers
```

```
//example 1
```

```
let a = 20;
```

```
let b = 10;
```

```
if (a > b) {  
    console.log(" a is greater than b. ");  
} else if (a == b) {  
    console.log(" a is equal to b. ");  
} else {  
    console.log(" a is less than b. ");  
}
```

```
//example 2
```

```
let a1 = 10;
```

```
let b1 = 20;
```

```
if (a1 > b1) {  
    console.log(" a is greater than b. ");
```

```
} else if (a1 == b1) {  
    console.log(" a is equal to b. ");  
} else {  
    console.log(" a is less than b. ");  
}  
  
//example 3  
let a2 = 10;  
let b2 = 10;  
  
if (a2 > b2) {  
    console.log(" a is greater than b. ");  
} else if (a2 == b2) {  
    console.log(" a is equal to b. ");  
} else {  
    console.log(" a is less than b. ");  
}  
  
//to find gender of a person  
  
let gender = "";  
// let gender = "F";  
// let gender = "F";  
if (gender == "M") {  
    console.log("male");  
} else if (gender == "F") {
```

```
    console.log("female");  
} else {  
    console.log("invalid gender");  
}
```

/*

3: Switch Statement:->

it is used to perform different actions based on different conditions switch statement to select one of many code blocks to be executes.

break : this keyword is used to break out if the switch block, this stops the execution inside code block.

Default : this keyword is used to specify a piece of code if no case matches the given condition.

Syntax:

```
switch(expression) {  
    case x:  
        // code block  
        break;  
    case y:
```



```
    // code block
    break;
default:
    // code block
}
```

This is how it works:

1. The switch expression is evaluated once.
2. The value of the expression is compared with the values of each case.
3. If there is a match, the associated block of code is executed.
4. If there is no match, the default code block is executed.

*/

//Switch stament example:

```
console.log("Switch staement");
```

// example 1

```
let i = 5;
switch (i) {
  case 1:
    console.log("i is one");
    break;
```

```
case 2:
    console.log("i is two");
    break;
case 3:
    console.log("i is three");
    break;

default:
    console.log("i is greater than 3");
}
```

// example 2

```
let i1 = 3;
switch (i1) {
    case 1:
        console.log("i is one");
        break;
    case 2:
        console.log("i is two");
        break;
    case 3:
        console.log("i is three");
        break;

    default:
        console.log("i is greater than 3");
}
```

```
}
```

```
// example 3
```

```
let i2 = 2;
```

```
switch (i2) {
```

```
  case 1:
```

```
    console.log("i is one");
```

```
    break;
```

```
  case 2:
```

```
    console.log("i is two");
```

```
    break;
```

```
  case 3:
```

```
    console.log("i is three");
```

```
    break;
```

```
  default:
```

```
    console.log("i is greater than 3");
```

```
}
```

```
// example 4
```

```
let i3 = 1;
```

```
switch (i3) {
```

```
  case 1:
```

```
    console.log("i is one");
```

```
    break;
```

```
  case 2:
```

```
    console.log("i is two");  
    break;  
case 3:  
    console.log("i is three");  
    break;  
  
default:  
    console.log("i is greater than 3");  
}
```

// example 5

```
let grade = "B";
```

```
let result;
```

```
switch (grade) {  
    case 'A':  
        result = "Excellent";  
        break;  
    case 'B':  
        result = "Average";  
        break;  
    case 'C':  
        result = "Poor";  
        break;  
    default:
```

```
        result = "No grade";
    }
    console.log(result);

// example 6
let grade1 = "A";

let result1;

switch (grade1) {
    case 'A':
        result1 = "Excellent";
        break;
    case 'B':
        result1 = "Average";
        break;
    case 'C':
        result1 = "Poor";
        break;
    default:
        result1 = "No grade";
}
console.log(result1);

// example 7
let grade3 = "C";
```

```
let result3;

switch (grade3) {
  case 'A':
    result3 = "Excellent";
    break;
  case 'B':
    result3 = "Average";
    break;
  case 'C':
    result3 = "Poor";
    break;
  default:
    result3 = "No grade";
}
console.log(result3);
```

```
// example 8
```

```
let grade4 = " ";
```

```
let result4;
```

```
switch (grade4) {
  case 'A':
    result4 = "Excellent";
```

```
        break;
    case 'B':
        result4 = "Average";
        break;
    case 'C':
        result4 = "Poor";
        break;
    default:
        result4 = "No grade";
}
console.log(result4)
```