if, else, else....if

if Statement

Use if conditional statement if you want to execute something based on some condition.

```
if(boolean expression)
{
  // code to be executed if condition is true
}
if (name == 'Debora')
{
  console.log('Hi, Debora');
}
if (name != 'George')
{
  console.log('You are not George')
}
let age = 18;
if (age >= 18) {
  console.log('You can sign up');
}
```

if...else condition

The if statement executes a block if a condition is true. When the condition is false, it does nothing. But if you want to execute a statement if the condition is false, you can use an if...else statement.

The else statement must follow if or else if statement. Multiple else block is NOT allowed.

```
if(condition expression)
```

```
{

   //Execute this code..

}

else{

   //Execute this code..

}

var mySal = 500;

var yourSal = 1000;

if( mySal > yourSal)

{

   console.log("My Salary is greater than your salary");

}

else

{

   console.log("My Salary is less than or equal to your salary");

}
```

- In this syntax, the condition is a value or an expression that evaluates to true or false.
- If the condition is true, the if...else statement executes the block that follows the **if branch.**
- If the condition is false, the if...else statement executes the block that follows the **else branch.**

else...if condition

To check **multiple conditions** and execute the corresponding block if a condition is true, you use the if...else...if statement like this:

```
if (condition1) {

 // ...

}

else if (condition2) {
```

```
   // ...
}
else if (condition3) {
   //...
}
 else {
   //...
}
```
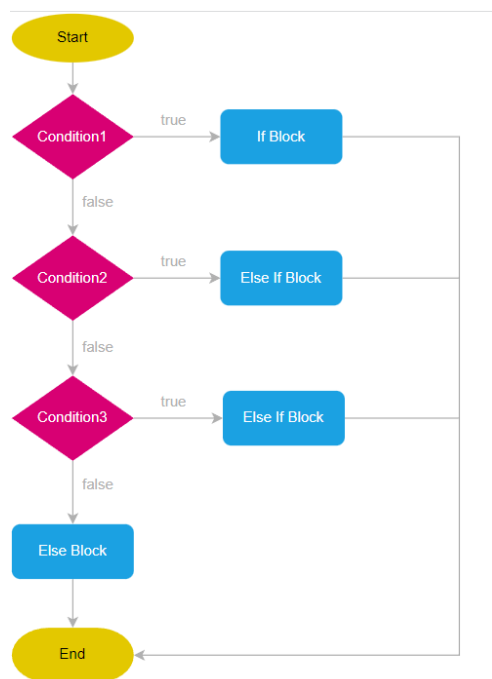


```
let month = 6;
let monthName;
if (month == 1)
 {
  monthName = 'Jan';
}
else if (month == 2)
 {
```

```
      monthName = 'Feb';

   }

   else if (month == 3)

   {

     monthName = 'Mar';

   }

   else if (month == 4)

    {

     monthName = 'Apr';

   }

   else if (month == 5)

    {

     monthName = 'May';

   }

    else if (month == 6)

    {

     monthName = 'Jun';

   }

    else if (month == 7)

   {

     monthName = 'Jul';

   }

   else if (month == 8)

    {

     monthName = 'Aug';

   }

   else if (month == 9)

    {
```

```
  monthName = 'Sep';

}

else if (month == 10)

 {

  monthName = 'Oct';

}

else if (month == 11)

 {

  monthName = 'Nov';

}

else if (month == 12)

{

  monthName = 'Dec';

}

else

{

  monthName = 'Invalid month';

}
```

console.log(monthName);

JavaScript switch case

The switch statement evaluates an **expression**, compares its result with **case values**, and executes the statement associated with the matching **case value.**

```
switch (expression)

{

   case value1:

      statement1;

      break;

   case value2:
```

```
    statement2;

    break;

  case value3;

    statement3;

    break;

  default:

    statement3;

}
```
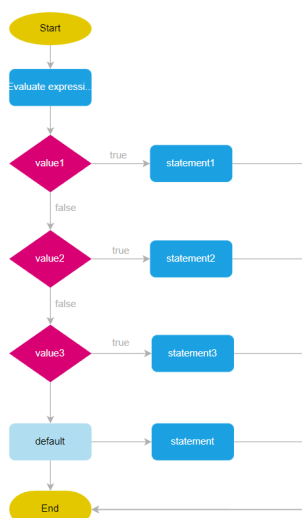
How it works.

- First, evaluate the **expression** inside the parentheses after the switch keyword.
- Second, **compare** the result of the **expression with the value1, value2**, … in the case branches from top to bottom. The switch statement uses the strict comparison (===).
- Third, **execute the statement** in the case branch where the result of the **expression** equals the **value** that follows the case keyword. then The **break statement** exits the switch statement.
- If the result of the expression does not **strictly equal to any value**, the switch statement will execute the statement in the **default branch.**
- That the switch statement **will stop comparing** the expression's result with the remaining case values as long as it **finds a match.**
- The switch statement is like the **if…else…if** statement. But it has more readable syntax.

flow diagram switch case

Example

```
let day = 3;

let dayName;


switch (day)
{
 case 1:
  dayName = 'Sunday';

   break;
 case 2:
  dayName = 'Monday';

   break;
 case 3:
  dayName = 'Tuesday';

   break;
 case 4:
  dayName = 'Wednesday';

   break;
 case 5:
  dayName = 'Thursday';

   break;
 case 6:
  dayName = 'Friday';

   break;
 case 7:
  dayName = 'Saturday';
```

```
    break;

  default:

    dayName = 'Invalid day';

}

console.log(dayName); // Tuesday
```

Project

1.write a code to Calculate student grade if student mark are greater than or equal to 90 print grade A, or if student mark are greater than or equal 80, print grade B, or if student mark are greater than or equal 70, print grade C, else print grade F