JavaScript Program to Swap Two Variables

Example 1: Using a Temporary Variable:

```
let a = 10;
let b = 12;
console.log(`Before swapping ${a}`);
console.log(`before swapping ${b}`);

//create  a temporary variable
let temp;

//swap variables

 temp = a;
a = b;
b = temp;
console.log(`After swapping ${a}`);
console.log(`After swapping ${b}`);

//output
Before swapping :10
Before swapping :12
After swapping :12
After swapping :10
```

1. We created a variable to store the value of temporarily.

   temp

   a

2. We assigned the value of to .

   b

   a

3. The value of is assigned to

   temp

b

As a result, the value of the variables are swapped.

Example 2: Using es6(ES2015) Destructuring assignment:

```
let  num1 = 25;
let num2 = 30;
console.log(`Before swapping ${num1}`);
console.log(`before swapping ${num2}`);

 //using destructuring
[num1, num2 = num1, num2]

//after swapping
console.log(`After swapping ${num1}`);
console.log(`After swapping ${num2}`);

//output
Before swapping 25
before swapping 30
After swapping 25
After swapping 25
```

Example 3: Using Arithmetic Operators:

```
let  a = 10;
let b = 20;

console.log(`Before swapping ${a}`);
console.log(`Before swapping ${b}`);

//swappping variable
 a = a + b;
b = a - b;
a = a- b;
console.log(`After swapping ${a}`);
console.log(`After swapping ${b}`);
//output
Before swapping 10
Before swapping 20
After swapping 20
After swapping 10
```

Example 4: Using Bitwise XOR operator:

```
let a = 20;
let b = 30;
console.log(`Before swapping ${a}`);
console.log(`Before swapping ${b}`);

//swap the variables
a = a^b;
b = a^b;
a = a^b;
console.log(`After swapping ${a}`);
console.log(`After swapping ${b}`);

//output:
Before swapping 20
Before swapping 30
After swapping 30
After swapping 20
```