

**Task 1.** Write a program to check if the variable is a number and if it's a number, check if it is divisible by 2. If it is, print the result, if not, show "X".

*Sample input: 10*

*Output: 10 / 2 = 5*

*Sample input: 7*

*Output: X*

```
// Notice that code written in this way will not be executed since it is
// ignored by JavaScript and called "Comments"

// This is the variable with name "input" which we are checking
// Replace the variable value to test with some other values
// And observe what will happen

var input = 103;

if ((typeof input) == 'number') {

    // At this point, the variable is a number, condition is true,
    // and we can start checking if a variable is divisible by 2

    if ((input % 2) === 0) {
        // At this point variable is divisible by two

        // We need to display the division result so we create new
        // variable to store that result
        var divisionResult = input / 2;

        // Now we form a string to display our result
        console.log(input + " / 2 = " + divisionResult);

    } else {
        // If condition in if statement is validated as false,
        // program execution will skip the if block and continue here

        // We are just displaying "X" as it was required in the assignment
        console.log("X");
    }

}
```

```
// Same code as above just written in a more readable way

var input = 103; // Replace these values to try other inputs
var isNumber = (typeof input) == 'number';

if (isNumber) {

    // New variable with boolean type for sake of readability
    var isDevisableByTwo = (input % 2) === 0;

    if (isDevisableByTwo) {

        // We need to display the division result so we create a new variable
        // to store that result
        var divisionResult = input / 2;

        // Now we form a string to display our result
        var outputText = input + " / 2 = " + divisionResult;

        console.log(outputText);
    } else {
        // We are just displaying "X" as it was required in assignment
        console.log("X");
    }

}
```

**Task 2.** Write a conditional statement to find the largest of five numbers. Display the result in the console.

Sample numbers: -5, -2, -6, 0, -1

Output: 0

```
var a = -5;
var b = -2;
var c = 6;
var d = 0;
var f = -1;

if (a > b && a > c && a > d && a > f) {
    console.log(a);
} else if (b > a && b > c && b > d && b > f) {
    console.log(b);
} else if (c > a && c > b && c > d && c > f) {
    console.log(c);
} else if (d > a && d > c && d > b && d > f) {
    console.log(d);
} else {
    console.log(f);
}
```

**Task 3.** Write a conditional statement to sort three numbers.

Sample numbers : 0, -1, 4

Output : 4, 0, -1

```
var x = 0;
var y = -1;
var z = 4;

if (x > y && x > z) {
    if (y > z) {
        console.log(x + ", " + y + ", " + z);
    } else {
        console.log(x + ", " + z + ", " + y);
    }
} else if (y > x && y > z) {
    if (x > z) {
        console.log(y + ", " + x + ", " + z);
    } else {
        console.log(y + ", " + z + ", " + x);
    }
} else if (z > x && z > y) {
    if (x > y) {
        console.log(z + ", " + x + ", " + y);
    } else {
        console.log(z + ", " + y + ", " + x);
    }
}
```

**Task 4.** Write a conditional statement to find the sign of product of three numbers. Display the result in the console with the specified sign.

Sample numbers: 3, -7, 2

Output: The sign is -

```
var x = 3;
var y = -7;
var z = 2;

if (x > 0 && y > 0 && z > 0) {
    console.log("The sign is +");
} else if (x < 0 && y < 0 && z > 0) {
    console.log("The sign is +");
} else if (x > 0 && y < 0 && z < 0) {
    console.log("The sign is +");
} else if (x < 0 && y > 0 && z < 0) {
    console.log("The sign is +");
} else {
    console.log("The sign is -");
}
```

**Task 5.** Write a program that compares two numbers and displays the larger. Display the result in the console.

```
var num1 = 14,  
    num2 = 13;  
  
if (num1 > num2) {  
    console.log("The larger of " + num1 + " and " + num2 + " is " + num1 + ".");  
} else if (num2 > num1) {  
    console.log("The larger of " + num1 + " and " + num2 + " is " + num2 + ".");  
} else {  
    console.log("The values " + num1 + " and " + num2 + " are equal.");  
}
```