JavaScript

```
// single line comment
/* multiline
   comment */
```

```
console.log( "message" );
prompt( "ask user" );
confirm( "OK or cancel" );
```

```
typeof "word"; // "string"
typeof 5;      // "number"
debugger;
```

Variables

```
const   < cannot change, block scoped
let     < can change,    block scoped,
var     < can change,    function scoped, hoisted

let myString = "hi";   < declaring & assign
let num = 10;            values to variables
let myBoole = true;
myBoole = false;       < reassigning values

myString.toUpperCase(); // "HELLO"
myString.charAt(0);     // "h"

parseFloat(num);    // 10.0
num.toFixed(2);     // 10.00
```

Arrays

```
let myArray = ["A", "B", "C"];
myArray[0];     // "A"
myArray[2];     // "C"

myArray.length;         // 3
myArray.push("D");
myArray.indexOf("B")    // 1
```

Functions

```
function myFunc() {   < declaring function
    // function code here
}
myFunc();             < calling function

function addNums(n1, n2=0) {
    return n1 + n2;
}
addNums(1, 2);  // becomes 3
addNums(5);     // becomes 5
```

Loops

```
for (let i=0; i<10; i+=1) {
    console.log(i);          < loops 10 times
}
for (let item of myArray) {
    console.log(item);       < loops over array
}
```

Operators

```
let x = 1; let y = 2;
```

Comparison

```
x == y    // false
x === y   // false
x !== y   // true
x < y     // true
x >= y    // false
```

Arithmetic

```
x + y     // 3
x - y     // -1
x * y     // 2
x / y     // 0.5
```

Assignment

```
x = 1     // x is now 1
x += 1    // x is now 2
x -= 1    // x is now 1
x *= 2    // x is now 2
```

String

```
y + "string"       // "2string"
```

Logical

```
x === 50 && y === 2   // false
x === 50 || y === 2   // true
```

Conditionals if else

```
if (num > 20) {
    // if num is greater than 20
}
else if (num <= 20 && num > 10) {
    // if num is lesser or
    // equal to 20 AND num is
    // greater than 10
}
else {
    // if none of the above
    // are true i.e. num <= 10
}
```

Press **ctrl + shift + i** or Press **F12** for browser **console** window