// 1)  check how isNaN works in different scenario

// console.log(isNaN(NaN));

 true, because NaN is Not-a-Number

// console.log(isNaN("NaN"));

true, string "NaN" is coerced to NaN

// console.log(isNaN(undefined));

true, undefined is coerced to NaN

// console.log(isNaN({}));

 true, object is coerced to NaN

// console.log(isNaN("123"));

false, string "123" is coerced to number 123

// console.log(isNaN(123));

 false, 123 is a number

// console.log(isNaN(""));

false, empty string is coerced to number 0

// console.log(isNaN(" "));

false, string with a space is coerced to number 0

// console.log(isNaN(true));

  false, true is coerced to number 1

// console.log(isNaN(false));

false, false is coerced to number 0

// console.log(isNaN(null));

 false, null is coerced to number 0

// console.log(isNaN("hello"));     //

 true, string "hello" is coerced to NaN

// 2) study types of coercion

Type Coercion

Type coercion refers to the automatic or implicit conversion of

 values from one data type to another. This process happens in

 the background during operations involving values of different types.

Types of Type Coercion

Implicit Coercion: This occurs automatically when JavaScript

encounters an operation involving different data types.

Explicit Coercion: This is when you manually convert a value

 from one type to another using functions or methods.

Explicit Type Conversion

JavaScript type conversion, allowing you to convert values

 from one data type to another.

String(): Converts a value to a string.

let num = 123; let str = String(num); console.log(str); // Output: "123"

Number(): Converts a value to a number.

let str = "123"; let num = Number(str); console.log(num); // Output: 123

3. Boolean(): Converts a value to a boolean.

let num = 0; let bool = Boolean(num); console.log(bool); // Output: false

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let num = 0; let bool = Boolean(num); console.log(bool); // Output: false

// // 3) write a program to print a random otp

let otp = '';

const characters = '0123456789';

const otpLength = 6;

for (let i = 0; i < otpLength; i++) {

  otp += characters.charAt(Math.floor(Math.random() \* characters.length));

}

console.log(`Your OTP is: ${otp}`);