let str = "Hello, JavaScript World!";

// 1. length

console.log("Length:", str.length);

// 2. charAt()

console.log("charAt(0):", str.charAt(0));

// 3. charCodeAt()

console.log("charCodeAt(0):", str.charCodeAt(0));

// 4. at()

console.log("at(-1):", str.at(-1));

// 5. concat()

console.log("concat():", str.concat(" Enjoy Coding!"));

// 6. includes()

console.log("includes('Java'):", str.includes("Java"));

// 7. indexOf()

console.log("indexOf('World'):", str.indexOf("World"));

// 8. lastIndexOf()

console.log("lastIndexOf('o'):", str.lastIndexOf("o"));

// 9. slice()

console.log("slice(7, 17):", str.slice(7, 17));

// 10. substring()

console.log("substring(7, 17):", str.substring(7, 17));

// 11. substr() - deprecated but still works

console.log("substr(7, 10):", str.substr(7, 10));

// 12. toLowerCase()

console.log("toLowerCase():", str.toLowerCase());

// 13. toUpperCase()

console.log("toUpperCase():", str.toUpperCase());

// 14. trim()

let messy = " Trim this string! ";

console.log("trim():", `"${messy.trim()}"`);

// 15. trimStart() / trimLeft()

console.log("trimStart():", `"${messy.trimStart()}"`);

// 16. trimEnd() / trimRight()

console.log("trimEnd():", `"${messy.trimEnd()}"`);

// 17. startsWith()

console.log("startsWith('Hello'):", str.startsWith("Hello"));

// 18. endsWith()

console.log("endsWith('World!'):", str.endsWith("World!"));

// 19. repeat()

console.log("repeat(2):", str.repeat(2));

// 20. replace()

console.log("replace('World', 'Universe'):", str.replace("World", "Universe"));

// 21. replaceAll()

let text = "apple apple apple";

console.log("replaceAll('apple', 'orange'):", text.replaceAll("apple", "orange"));

// 22. split()

console.log("split(' '):", str.split(" "));

// 23. match()

console.log("match(/[A-Z]/g):", str.match(/[A-Z]/g));

// 24. matchAll()

let iterator = str.matchAll(/o/g);

console.log("matchAll(/o/g):", [...iterator]);

// 25. search()

console.log("search('JavaScript'):", str.search("JavaScript"));

// 26. padStart()

let padStr = "42";

console.log("padStart(5, '0'):", padStr.padStart(5, '0'));

// 27. padEnd()

console.log("padEnd(5, '\*'):", padStr.padEnd(5, '\*'));

// 28. toString()

console.log("toString():", str.toString());

// 29. valueOf()

console.log("valueOf():", str.valueOf());

// 30. normalize()

let accented = "\u00F1"; // ñ

console.log("normalize():", accented.normalize());

// 31. localeCompare()

console.log("localeCompare('Hello'):", str.localeCompare("Hello"));

// 32. codePointAt()

console.log("codePointAt(0):", str.codePointAt(0));

// 33. fromCharCode()

console.log("fromCharCode(72, 101, 108, 108, 111):", String.fromCharCode(72,101,108,108,111));

// 34. fromCodePoint()

console.log("fromCodePoint(128512):", String.fromCodePoint(128512)); // 😀