

JavaScript Pre-Assessment 4 > JS ex1.js > isStrongPassword

```
1 function isStrongPassword(password) {  
2     const minLength = password.length >= 8;  
3     const hasLower = /[a-z]/.test(password);  
4     const hasUpper = /[A-Z]/.test(password);  
5     const hasDigit = /\d/.test(password);  
6     const hasSpecial = /^[^a-zA-Z0-9]/.test(password);  
7  
8     if (minLength && hasLower && hasUpper && hasDigit && hasSpecial) {  
9         return "Strong Password";  
10    }  
11    return "Weak Password";  
12 }  
13  
14 // Example  
15 console.log(isStrongPassword("Strong@123")); // Strong Password  
16 console.log(isStrongPassword("weakpass")); // Weak Password  
17
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

```
C:\Program Files\nodejs\node.exe .\JavaScript Pre-Assessment 4\ex1.js  
Strong Password  
Weak Password
```

JavaScript Pre-Assessment 4 > JS ex2.js > ...

```
1 function arrayWrapper(nums, operation) {
2   if (operation.toLowerCase() === "add") {
3     |   return nums.flat().reduce((sum, num) => sum + num, 0);
4   } else if (operation.toLowerCase() === "string") {
5     |   return nums.flat();
6   }
7 }
8
9 // Examples
10 console.log(arrayWrapper([[1, 2], [3, 4]], "Add")); // Output: 10
11 console.log(arrayWrapper([[23, 98], [42, 70]], "String")); // Output: [23, 98, 42, 70]
12
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
C:\Program Files\nodejs\node.exe .\JavaScript Pre-Assessment 4\ex2.js
10
> (4) [23, 98, 42, 70]
```

JavaScript Pre-Assessment 4 > JS ex3.js > ...

```
1 function modifyAndExpand(arr) {
2   let result = [];
3   arr.forEach(num => {
4     |   result.push(num, num / 2, num * 2);
5   });
6   return result;
7 }
8
9 // Example
10 console.log(modifyAndExpand([5, 10, 20, 2, 0, 33, 100, 90]));
11 // Output: [5, 10, 15, 20, 2, 22, 0, 33, 33, 100, 100, 90, 90, 190]
12
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
C:\Program Files\nodejs\node.exe .\JavaScript Pre-Assessment 4\ex3.js
> (24) [5, 2.5, 10, 10, 5, 20, 20, 10, 40, 2, 1, 4, 0, 0, 0, 33, 16.5, 66, 100, 50, 200, 90, 45, 180]
```

JavaScript Pre-Assessment 4 > JS ex4.js > ...

```
1 function moveZeroesToEnd(arr) {
2   let nonZeroes = arr.filter(num => num !== 0);
3   let zeroes = arr.filter(num => num === 0);
4   return [...nonZeroes, ...zeroes];
5 }
6
7 // Example
8 console.log(moveZeroesToEnd([0, 1, 0, 3, 12])); // Output: [1, 3, 12, 0, 0]
9
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

C:\Program Files\nodejs\node.exe .\JavaScript Pre-Assessment 4\ex4.js
> (5) [1, 3, 12, 0, 0]

JavaScript Pre-Assessment 4 > JS ex5.js > ...

```
1 function removeSpaces(str) {
2   let result = "";
3   for (let char of str) {
4     if (char !== " ") {
5       result += char;
6     }
7   }
8   return result;
9 }
10
11 // Example
12 console.log(removeSpaces("Remove spaces from a string")); // Output: "Removespacesfromastring"
13
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

C:\Program Files\nodejs\node.exe .\JavaScript Pre-Assessment 4\ex5.js
Removespacesfromastring

JavaScript Pre-Assessment 4 > JS ex6.js > ...

```
1 function swapNumbers(a, b) {  
2     console.log(`Before Swap: a = ${a}, b = ${b}`);  
3     a = a + b;  
4     b = a - b;  
5     a = a - b;  
6     console.log(`After Swap: a = ${a}, b = ${b}`);  
7 }  
8  
9 // Example  
10 swapNumbers(5, 10);  
11
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

```
C:\Program Files\nodejs\node.exe .\JavaScript Pre-Assessment 4\ex6.js  
Before Swap: a = 5, b = 10  
After Swap: a = 10, b = 5
```

JavaScript Pre-Assessment 4 > JS ex7.js > ...

```
1 function areAnagrams(str1, str2) {  
2   |   return str1.split('').sort().join('') === str2.split('').sort().join('');  
3 }  
4  
5 // Example  
6 console.log(areAnagrams("listen", "silent")); // Output: true  
7 console.log(areAnagrams("hello", "world"));   // Output: false  
8
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

```
C:\Program Files\nodejs\node.exe .\JavaScript Pre-Assessment 4\ex7.js  
true  
false
```