1. **Implicit Coercion in JavaScript**
2. console.log('A' - 1) // NaN
3. console.log('A' + 1) // “A1”
4. console.log(2 + '2' + '2') // “222”
5. console.log('hello' + 'world' + 89) // "helloworld89"
6. console.log('hello' - 'world' + 89) // NaN
7. console.log('hello' + 78) // “hello78”
8. console.log('78' - 90 + '2') // “-122”
9. console.log(2 - '2' + 90) // “90”
10. console.log(89 - '90' / 2)// “44”
11. console.log(89 + 'hello' + 90 / 9) // “89hello19”
12. console.log(2 + '2' + null) // “22null”
13. console.log(true > false) // true
14. console.log((true + false) /2 ))// 1 “(1+0/2)”
15. console.log((true+false) > 3))// false “(because 1 + 0) is not more than 3
16. **Extract the first five letters from a string ('gfuh ieiuei')**

var str = 'gfuh ieiuei';

console.log(str.slice(0,4));

Output: gfuh

1. **Get the length of a string and make it uppercase ('hduej dij')**

var str = 'hduej dij';

console.log(str.toUpperCase());

Output: HDUEJ DIJ

1. **Take a string, make it uppercase and trim it (' biji jdo ')**

var str = ' biji jdo ';

console.log(str.toUpperCase().trim());

Output: BIJI JDO

1. **Replace specified word in a string ('', ''**)

var str = 'harry maguire';

console.log(str.replace("maguire", "potter"));

Output: harry potter

1. **Find the duplicate in a string() (use array)**

const str = "Alice is pretty. Alice live beside my house";

function findDuplicates(str) {

const result = [];

const arr = str.split(" ");

const count = {};

arr.forEach((word) => {

if (!count[word]) {

count[word] = 1;

} else {

count[word] += 1;

}

});

let all = Object.keys(count);

all.forEach((key) => {

if (count[key] > 1) {

result.push(key);

}

});

return result;

}

console.log(findDuplicates(str))

Output: [“Alice”]

1. **Reverse a string (use the array method)**

var color1 ="'pink', 'red', 'orange', 'blue', 'black','pink'";

console.log(color1.split(",").reverse().join());

Output: "'pink', 'black', 'blue', 'orange', 'red','pink'"

1. **Find the highest and lowest value in the array**

const number = [2, 4, 6, 100, 93, 5, 2, 1, 76]

console.log(Math.min(...number))

console.log(Math.max(...number))

Output: 1,100

1. **Practice array of objects**

var footballName = [

{

firstName: "Xabi",

lastName: "Alonso"

},

{

firstName: "Sadio",

lastName: "Mane"

},

{

firstName: "Jordan",

lastName: "Henderson"

},

{

firstName: "Steven",

lastName: "Gerrard"

},

{

firstName: "Luis",

lastName: "Garcia"

}

]

1. **Display the first 3 elements in an array**

console.log(footballName.slice(0, 3))

Output:

* [[object Object] {  
    firstName: "Xabi",  
    lastName: "Alonso"  
  }, [object Object] {  
    firstName: "Sadio",  
    lastName: "Mane"  
  }, [object Object] {  
    firstName: "Jordan",  
    lastName: "Henderson"  
  }]

1. **Remove 4th (index) element and add 2 element there**

footballName.splice(4, 1, {firstName: "Diogo", lastName: "Jota"} , {firstName: "Joel", lastName: "Matip"})

console.log(footballName)

//At position 4, add new items, and remove 1 item

Answer:

* [[object Object] {  
    firstName: "Xabi",  
    lastName: "Alonso"  
  }, [object Object] {  
    firstName: "Sadio",  
    lastName: "Mane"  
  }, [object Object] {  
    firstName: "Jordan",  
    lastName: "Henderson"  
  }, [object Object] {  
    firstName: "Steven",  
    lastName: "Gerrard"  
  }, [object Object] {  
    firstName: "Diogo",  
    lastName: "Jota"  
  }, [object Object] {  
    firstName: "Joel",  
    lastName: "Matip"  
  }]

1. **Use the str1, str2, str3 variables to create the Result string. Keep the extra spaces, lowercase and uppercase letters in mind.**

console.log(output = str1 + " " + str2.trim() + " " + str3.trim().toLowerCase().replace("hawaii" , "Hawaii"))

Output: "Today is a beautiful day in Hawaii."

\* replace “hawaii” to “Hawaii” because the lowercase function will put all str 3 to lower case!\*