Exam 1

Due Nov 7 at 11:59pm   **Points** 200   **Questions** 20

Available Nov 7 at 12am - Nov 7 at 11:59pm about 24 hours   **Time Limit** 150 Minutes

Attempt History

	Attempt	**Time**	**Score**
LATEST	**Attempt 1**	99 minutes	110 out of 200 *

* Some questions not yet graded

⊘ Correct answers are hidden.

Score for this quiz: **110** out of 200 *

Submitted Nov 7 at 4:41pm

This attempt took 99 minutes.

Question 1	**10 / 10 pts**

Is JavaScript a multithreaded language?

○ True

◉ False

Question 2	**10 / 10 pts**

```
What the returned value of the print statement
console.log(0.1 + 0.2 == 0.3);
```

○ True

⦿ False

Question 3   10 / 10 pts

Which method _____ do you use to add an element at the beginning of an array?

Example: Given an array

Before inserting a new element

arr = ["test1", "test2"];

After inserting the new element called "test3"

arr = ["test3", "test1", "test2"]

○ shift()

⦿ unshift()

○ push()

○ add()

Question 4   10 / 10 pts

Which of the following statements is invalid?

○ let arr = new Array(5);

○ let arr = [];

⦿ let arr = Array(5);

Question 5

10 / 10 pts

What will be the value of z after the last statement is executed?

var x = 10;

var y = 20;

var z = "" + x + y;

1020

Question 6

10 / 10 pts

In JavaScript, when a variable is declared but is not assigned a value what would be the data type of the variable _____

undefined

Question 7

10 / 10 pts

What does the following statement print?

console.log(null == undefined);

○ True

○ False

Question 8   10 / 10 pts

Given the following expression, what would be the scope of the variable x?

x = 5;

> global

Question 9   0 / 10 pts

In JavaScript, a variable is a _____ that refers to a value in the program

> reference

Question 10   0 / 10 pts

What does the following function print? _____

```
function print() {
  console.log(a);
  let a = 5;
}
```

> error

Question 11

10 / 10 pts

//More information about the slice function

https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/String/slice (https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/String/slice)

----

var str = "This is a JavaScript string";

var res2=str.slice(-6);
console.log(res2);

What does the snippet print? _____

string

Question 12

Not yet graded / 10 pts

```
arr = [1,2,3,4,5];
Implement a function that returns a new array that contains only even
numbers
function even(arr) {
    // Your code is here.
}
or using function epxression
const even = (arr) => {
  //your code is here.
}
Hint: Use modulo operator (%) to check if a given number is even.

Your Answer:
function even(arr) {
    let newarr = [];
```

```
    for(let i = 0; i <arr.length; i++){
        if(arr[i]%2 === 0){
            newarr.push(arr[i])
        }
    }
    return newarr;
}
```

Question 13

10 / 10 pts

var str = "This is a JavaScript string";
var res = str.substr(5, 2);
console.log(res);
What would be the value of the res variable? _____

| is |

Question 14

Not yet graded / 10 pts

Implement a function named **extractName** that extracts the first name and last name from a given name.

The function accepts a string and returns an array that stores the first then last name.

Assume that the given first and the last name is separated by a single white space.

You should test your function and it should pass the following two tests

Test cases:

console.log(extractName('John Doe'));

```
console.log(extractName('Mary Smith'));
return
[ 'John', 'Doe' ]
[ 'Mary', 'Smith' ]
```

Your Answer:
```
function extractName(name){
    return name.split(' ');
}
```

Question 15   **Not yet graded / 10 pts**

Given an array:

arr = [1,2,3,4,5,6,7,8,9]

Implement a function that randomizes the given array

```
function shuffle(arr) {
    //your code is here.
}


Hint: use Math.random function
https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Obj
ects/Math/random   (https://developer.mozilla.org/en-US/docs/Web/JavaScript/Refere
nce/Global_Objects/Math/random)
To generate a random number within a range (min, max), please use the follow
ing
formula:
const randNumber = (max - min) * Math.random() + min
where min is the current array index.
```

Your Answer:
```
function shuffle(arr) {
    let max = arr.length -1;
    let newArr = [];
    for (let i = 0; i < arr.length; i++){
        let randNumber = Math.floor((max - i) * Math.random() + i);
        let temp = arr[i]
        arr[i] = arr[randNumber]
```

```
        arr[randNumber] = temp
    }

    return arr;
}
```

Question 16   10 / 10 pts

let fruits = ["Apple", "Orange"];

let another = fruits;

another.push("Pear");

console.log(fruits);

What does the console print?_____

> ['Apple', 'Orange', 'Pear']

Question 17   Not yet graded / 10 pts

Implement a function that accepts a string input and returns true or false

a. if the string contains a vowel return true

b. else return false

Function header

```
function containsVowels(str) {
//your code is here
}

Test cases:
str = 'hello';
console.log(containsVowels(str)); // should print true;

str = 'mnht';
console.log(containsVowels(str)); // should print false;
```

```
Hint: Vowels contain following letters a e i u o
```

Your Answer:

function containsVowels(str) {

   for(i=0; i<str.length; i++){

      if(str[i]==='a'|| str[i]==='e' || str[i]==='i'|| str[i]==='u' || str[i]==='o'){

         return true;

      }

   }

   return false;

   }

Question 18

Not yet graded / 10 pts

```
Given an array:
arr [1,2,3,4,5]
```

Implement a function that calculates an average value of the given array.
This function will **return an average** value

function header

```
function average(arr) {
//your code is here
}
```

Your Answer:

function average(arr) {

   let sum = 0;

   for(let i=0; i<arr.length; i++){

      sum += arr[i];

   }

   return sum/arr.length;

}

Incorrect

Question 19

0 / 10 pts

What does the console print?_____
```
let fruits = ["Apple", "Orange"];
for (item in fruits) {
  item = "reset";
}
console.log(fruits);
```

['Apple', 'Orange']

Question 20

Not yet graded / 10 pts

Implement a function that prints 'Hello World' to the console. This function should be invoked immediately without a need to call it.

Your Answer:
```
(function(){
console.log("Hello World")
}());
```

Quiz Score: **110** out of 200