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JavaScript Exam 1

Time Limit: 60 minutes

Total Possible Points: 58

This is an open-note exam comprised of 8 True & False, 7 Matching, 9 Multiple Choice and 6 Coding Problems for a total of 75 points. Please answer each question to the best of your ability. Do not seek help from other students regarding the exam. Turn in the exam and JavaScript code file to your folder on GitHub or email them to me directly by 9:00 am Saturday May 2nd.

True & False

*Please read each question carefully, and legibly write T (true) or F (false) on the line next to the question. Each question is worth **1 point**.*

- ☐ T ☐ Undefined variables are those that are declared in the program but have not been given any value
- ☐ T ☐ 92 == '92' returns the result true
- ☐ F ☐ The keyword **continue** exits a loop
- ☐ T ☐ The **NULL** value is used to represent no value or no object
- ☐ F ☐ The expression 7 % 2 will return 3
- ☐ T ☐ The **OR** operator looks like this ||
- ☐ F ☐ The keyword **this** refers to a function's calling/"owner" object
- ☐ T ☐ An array is a primitive data type

Matching

*Match each term to its definition. Each question is worth **1 point**.*

- | | |
|--|--|
| <input type="checkbox"/> E <input type="checkbox"/> String | <input type="checkbox"/> C <input type="checkbox"/> Operator |
| <input type="checkbox"/> G <input type="checkbox"/> Object | a. A whole number (not a fraction) that can be positive, negative, or zero |
| <input type="checkbox"/> B <input type="checkbox"/> Floating Point | b. A number containing a decimal |
| <input type="checkbox"/> D <input type="checkbox"/> Boolean | c. A subset of algebra used for creating true/false statements |
| <input type="checkbox"/> F <input type="checkbox"/> Function | |
| <input type="checkbox"/> A <input type="checkbox"/> Integer | |

- d. A character that represents an action, as for example =, + or –
- e. A set of characters that can also contain spaces and numbers
- f. An abstract data type with properties and methods
- g. A block of code designed to perform a particular task.

Multiple Choice

*Please read each question carefully and clearly mark the best answer. Each question is worth **2 points**.*

1. The keyword 'this' in JavaScript refers to the _____ from where it is called.

a. Variable

b. Object

c. Function

2. If $a = 4$ and $b = "6"$, what would be the result of $a + 3 + b$

a. 76

b. 436

c. 13

3. What statement exits a loop?

a. exist

b. stop

c. break

4. Which characters are used for multi-line comments?

a. \\\

b. //

c. /*

5. Which of these variable keywords is NOT block scoped?

a. let

b. var

c. const

6. What array object method is used to remove the first element in an array?

d. pop()

e. shift()

f. split()

7. In the function below, what type of variable is count?

```
var count = 0;
```

```
function method () {
```

```
    count++;
```

```
}
```

a. Global

b. Local

c. Both

8. Which of these options is the correct way to retrieve the age property for the object:

```
var person = {firstName:"John", lastName:"Doe", age:50, eyeColor:"blue"};
```

a. person.age

b. getAge()

c. return age

9. What will the output of this code be?

```
var x = 21;
```

```
var print = function () {
```

```
    console.log(x);
```

```
    var x = 20;
```

```
};
```

```
print();
```

a. 20

- b. undefined
- c. 21

Coding Problems

*Please read each question and any sub-questions carefully and submit a JavaScript file with the coded answers to the GitHub folder. Each question is worth the amount of **points** distinguished at the end of the question. Partial credit will be given for this section.*

10. Create an array that containing all seven days of the week. (3 points)
11. Write a FOR loop that prints each day of the week from the array your created above. (4 points)
12. Write a SWITCH statement for days for the week using an integer number variable with the CASE statements. (3 points) EX: 1 – Sunday, 2 – Monday ... 7 - Saturday
13. Add a method to the object **person** called **display** that prints out the object's properties in the following format (4 points): **"5566 Doe, John 50yrs"**

```
var person = {  
    firstName: "John",  
    lastName : "Doe",  
    id : 5566,  
    age : 50  
    fullName : function() {  
        return this.firstName + " " + this.lastName;  
    }  
};
```
14. Write a recursive function takes one parameter and prints hello the number of times designated by the parameter before printing goodbye (6 points): Example: hello(2); would return "Hello Hello Goodbye"

15. Write an object called **House** that has 4 properties `streetAddress`, `zipCode`, `ownerLastName`, `yearBuilt`. The **House** object has two methods `ageOfHouse` and `isLocatedInIndiana`. Find the age of the home using the `Date` object methods and the year built. For the `isLocatedInIndiana` method, all Indiana zip codes are between 46001 and 47997. Finally, create array called **town** that has 3 or more **House** objects within it.
(10 point)