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Jan 31, 2025
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JavaScript class Homework

### **Data Types**

## 1. What is the following data type? Alphanumeric string

```
let x = salary;
salary = '$50,000';
```

2. How do you turn the following into a BigInt?

```
823549
const convertbigintHuge = BigInt(823549);
// 823549n
```

## 3. What is the purpose of the Symbol data type?

Symbol data type serves the primary purpose of creating unique identifiers. used as keys for object properties, ensuring they don't clash with other keys, even if they have the same name.

```
example
const id = Symbol('id');
const user = {
 name: 'John',
 [id]: 123
};
console.log(user[id]); // 123
```

# 4. What will the following code show in the console?

```
let width = 12;
let length = 4;
let area = 48;
console.log("The width of the box is ${width}, the height is ${height}, and the area is
${area}.";
answer:
```

The width of the box is 12, the height is 4, and the area is 48.

#### note:

The dollar sign followed by curly braces \${} is used to evaluate and embed expressions dynamically in template literals. const name = 'John Doe'; const age = 20; // Using

template literals for string interpolation console. log(`My name is \${name} and I'm \${age} years old.

The width of the box is 12, the height is 4, and the area is 48.

#### Note:

In JavaScript, NaN stands for "Not a Number". It is a special value that represents an undefined or unrepresentable numerical value.

### 5. True/False: NaN's data type is null.

#### Answer:

False

#### Note:

In JavaScript, NaN stands for "Not a Number". It is a special value that represents an undefined or unrepresentable numerical value.

n JavaScript, NaN is short for "Not-a-Number". In JavaScript, NaN is a number that is not a legal number. The Global NaN property is the same as the Number.

All of these comparisons return false, even though they might seem like they should be true. This is because NaN is not equal to any value, including null, undefined, false, true, or an empty string.

## Operators

- How would you negate the following variable in JavaScript?
   var numOfCars = -4;
  - a. -- numOfCars (spaces only for readability in document)
  - b. numOfCars (spaces only for readability in document)
  - c. +numOfCars
  - d. !numOfCars

#### Answer: d

#### Note:

The most common way to negate a predicate function is to use the ! operator. The isOdd() function above returns the opposite Boolean value of isEven()

### 2. What will the following show in the console?

4 \* ((12 \* 3) / 6) / 2

Answer: 12

## 3. What is the operator in the following statement?

x = < 5;

- a. Less than or equal to
- b. Greater than or equal to
- c. It's not an operator
- d. AND

Answer: a

# 4. What will be the output of the following code?

```
let hisName = "david';
let herName = 'betty';
let hisBalance = 10;
let herBalance = 25;
console.log(hisName == 'David' && (hisBalance >= 10 || herName == 'Betty) ||
herBalance >= 25)
```

- 5. Which of the following operators has the highest precedence?
  - a. !
  - b. &&
  - C. -
  - d. \*

**Answer: A**