Please include both questions and answers inside a PDF file. Don't forget to add your name to the file.

1. When is a logical AND operator true? When is it false?

A logical AND operator is true when both operands evaluate to true and is false when either operand evaluates to false.

2. When is a logical OR operator true? When is it false?

A logical OR operator is true when either operand evaluates to true and is false when both operands evaluate to false.

3. Write a line of JavaScript code that will return a random number between 1 and 100.

A line of JavaScrip code that will return a random number between 1 and 100 would be:

var randomNum = Math.floor(Math.random() * 100) + 1; **need to add one**

4. What is the value of a variable, if it is not initialized?

The value of a JavaScript variable that is not initialized is "undefined".

5. What function do you use to get input from a user?

The prompt(); function is used to get input from a user.

6. Compare and contrast the use of equal (=) and the use of double equal (==) in programming.

In computer science, the assignment operator (=) assigns the right operand to the left, while the equality operator (==) checks to see if the right operand equals the left.

7. Two or more nested if statements can be rewritten using which logic operator?

Two or more if statements can be rewritten using the AND (&&) operator.

8. Two or more if-else if statements can be rewritten using which logic operator?

Two or more if-else if statements can be rewritten using the OR (||) operator.

9. Write a program that checks to see if it will rain. The user will input the data and the program will decide if it will rain or not. In this universe, it always rains when the temperature is above 60 degrees Fahrenheit and lower than or equal to 80 degrees Fahrenheit. Paste the code here.

```
var isRaining = false;
var temperature;
temperature = prompt("In degrees fahrenheit, what's the temperature outside?");
if (temperature >= 60 && temperature <= 80) {
    isRaining = true;
    alert("It's raining! It's pouring!");
} else if(temperature < 60) {
    alert("It's too cold for rain!");
} else if(temperature > 80) {
    alert("It's way too hot for rain!");
}
```

10. Include a screenshot for the above rain program here.



