Lab 04: Introduction to JavaScript

1. Evaluate the following statements using Chrome DevTools Console:
    a. 760 % 9
    b. ("WIF2003 " + "Web Programming")[10]
    c. "helloworld".length % "him\\".length

2. Write a "JS Stalker" program in html (**stalker.html**) and an **external JavaScript file** named "**stalkerscript.js**". You JavaScript program needs to use variables, strings, prompt and console log to do the following tasks:
    a. Ask for the user's first name
    b. Ask for the user's last name
    c. Ask for the user's age
    d. Print out the user's full name in a message within a pop-up box: "Hello, `full name`! Welcome to this page."
    e. Print out the user's age in a sentence in the browser's JavaScript console: "You are `age` years old."
    f. Print out the user's full name and age in a sentence directly to the HTML document (**stalker.html**): "Hello, `full name`! You are `age` years old."

3. Evaluate the following statement (True or False):
```
var x = 10;
var y = "a"
y === "b" || x >= 10
```

4. Evaluate the following statement (True or False):
```
var x = 3;
var y = 8;
!(x == "3" || x === y) && !(y != 8 && x <= y)
```

5. Evaluate the following statement to check the Truthy and Falsy Values:
    a. !"Hello World"
    b. !""
    c. !null
    d. !0
    e. !-1
    f. !NaN

6. Print out all odd numbers between 10 and 40. Write two solutions: one with a ***while*** loop and one with a ***for*** loop.

7. Write a function **printReverse()** that takes an array as an argument and prints out the elements in the array in reverse order on the browser's JavaScript console (don't actually reverse the array itself).

    Sample output in console:
    printReverse([1,2,3,4]);
    4
    3
    2

```
1
printReverse(["a","b"]);
"b"
"a"
```

8. **var** someObject = {};

   Which of the following are valid:
   a. someObject._name = "Hedwig";
   b. someObject.age = 6;
   c. **var** prop = "color"
      someObject[prop] = "red";
   d. someObject.123 = true;

9. Create an array of movie objects. Each movie should have a title, rating, and hasWatched properties. Iterate through the array and print out something that looks like:

   You have watched "In Bruges" - 5 stars
   You have not seen "Frozen" - 4.5 stars
   You have seen "Mad Max Fury Road" - 5 stars
   You have not seen "Les Miserables" - 3.5 stars

10. Write a function prettyPrint() that accepts an object as an argument and prints out a "pretty" string version of the object.

```
prettyPrint({name: "Rusty", species: "dog", breed: "mutt"});
```

    The above code should print the following 3 lines:
    name: Rusty
    species: dog
    breed: mutt