

## Exercise 03: JavaScript Basics part 1<sup>1</sup>

**Title:** Simulate a password validation program in JavaScript

**Type:** Individual Assessment

**Score:** (15 points)

**Problem:** Create a JavaScript file and implement the following functions: Do not use Regular Expressions.

**Program specifications:**

1. A function for validating if 2 passwords match. (5 pts)
  - The function should accept 2 string parameters. Imagine that these represent the input from a signup form's password fields.

**Return true** if the following conditions are met, else **return false**.

- The two passwords match;
- the password has at least 8 characters; and
- the password has at least 1 number, 1 uppercase character, and 1 lowercase character

e.g.

```
validatePassword("helloworld", "hello")    // returns false
validatePassword("hello", "hello")          // returns false
validatePassword("hello1234", "hello1234")  // returns false
validatePassword("Hello1234", "Hello1234")  // returns true
validatePassword("HELL01234", "HELL01234")  // returns false
```

2. A function for reversing the password. (3 pts)
  - Create a function that returns a reversed string of the password.

**Consider** that the position of arrays starts from 0 [index] and each element is countable. If you are going to **reverse** the string, you have to initially refer to the index of the last element in an array. You may create a new variable that will concatenate each accessible character inside the loop.

3. A function for storing the password to the object. (2 pts)
  - Create a function that takes three parameters: name and two passwords. The function must return an object. The object contains the name and the newpassword as keys. If the passwords provided by the user are valid, use the reverse function you created earlier to be the value of newpassword. If not, then the value of newpassword is the first given password.

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<sup>1</sup> Prepared by CAG Angcana

**Submission Guidelines:** Accept the invite link posted in the Google Classroom's exer 4 to create your own GitHub classroom repository. Create a file **index.js** and push it into your repo.

Scores breakdown:

Criteria	Description
Use of GitHub (5 Points)	<ul style="list-style-type: none"><li>• Commit Messages - 3 points</li><li>• Documentation/ReadMe -1 point</li><li>• Use of GitHub classroom's repository for GitHub Pages - 1 point</li></ul>
Application of JavaScript Syntax (10 Points)	<ul style="list-style-type: none"><li>• Use of JavaScript Syntax (No Regular Expressions) / See Specs</li></ul>

**Sample output:**

```
storePassword("John", "Pass1234", "Pass1234") // returns {name: "John", newpassword:"4321ssaP"}
storePassword("John", "Pass123", "Pass12345") // returns {name: "John", newpassword:"Pass123"}
```