# Pair Programming Logic Lab 4

In the following exercise, you will be using JS to solve logical problems in pairs.

- Create a file "Name1Name2Lab4.js"
- You are **NOT** allowed to use JavaScript built in functions such as map, filter...
- All problems should be solved using loops
- For each problem create a function and name it as the problem states
- For each of the following problems, create a function

#### Problem 1: Px5

Write a function "getAvg" that takes an array and returns its average

Sample Input Sample Output

1, 2, 3

#### Problem 2: Px5

Write a function "search" that takes an array and an integer and returns true if it's present

| Sami | <u>ole Input</u> | Sample Output |
|------|------------------|---------------|
|      |                  |               |

0, 1, 2, 3, 4, 5 true

0, 1, 2, 3, 4, 5 8 false

#### Problem 3: Px5

Write a function "removeDuplicates" that takes an array and returns it without duplicates

Sample Input Sample Output

0, 1, 2, 3, 3, 5

#### Problem 4: Px5

Write a function "getMinMax" that takes an array and a word min or max and returns it

Sample Input Sample Output

0, 1, 2, 3, 4, 5 max 5

0, 1, 2, 3, 4, 5 min 0

#### Problem 5: Px5

Write a function "shuffle" that takes an array and a word left or right and shuffles accordingly

Sample Input Sample Output

0, 1, 2, 3, 4, 5 right 5, 0, 1, 2, 3, 4

0, 1, 2, 3, 4, 5 left 1, 2, 3, 4, 5, 0

### Problem 6: Px5

Write a function "intersect" that takes 2 arrays and returns an array of common elements

Sample Input Sample Output

0, 1, 2, 3, 4, 5 4, 5, 6, 7, 8, 9, 0 0, 4, 5

## Problem 7: Px5

Write a function "union" that takes 2 arrays and returns a merged array

Sample Input Sample Output

## Problem 8: Px5

Write a function "**toBinary**" that takes a number and returns its binary value

Write a function "hashArray" that takes an array and returns another array in binary values

Sample Input Sample Output

0, 1, 2, 3, 4 0, 1, 10, 11, 100