INT20101 Exam #1 (35 points/25%)

Instructions:

- Class lab and materials are not allowed.
- Only MDN Mozilla JavaScript is allowed. Other sites are not allowed
- Record your full screen during taking this exam.
- Do not share any document or code with other students.
- Write your code in VS Code and paste your code (text, not screenshot) in this question file and paste the screenshot of output under your code.

Part 2 (20 points/1 hour 30 minutes)

1. [5 points] Write a function that returns true if the first array is not a subset of the second array. Otherwise return false.

Example:

notSubsetArray([-1,-2], [1,2,3,4])
$$\rightarrow$$
 true notSubsetArray([2,4], [1,2,3,4]) \rightarrow false

- 2. [5 points] Write a function called "Roll" that accepts two numbers as the faces of two dice that are rolled.
 - a. Each dice has faces numbered from 1 to 6.
 - b. If both dice show the same number on top, it is considered a "Jackpot".
 - c. If the sum of the top faces is greater than or equal to sever, it is considered "High."
 - d. If the sum is less than seven, it is considered "Low".

Example:

$$Roll(3,2) \rightarrow 'Low'$$

$$Roll(6,5) \rightarrow 'High'$$

3. **[5 points]** Write a function that takes a string as a parameter. It converts all vowel characters to uppercase and converts all other letters to lowercase.

Example:

 $stringVowelToUpperCase('Hello~World') \xrightarrow{} 'hEllO~wOrld'$

4. **[5 points]** Write a function that finds the number in the array that appears the most. If there is more than one number with the same highest frequency, return 'None'. Also, return 'None' if all numbers in the array have the same frequency. The numbers in the array range from 1 to 5.

Example:

mostNumberlnArray([1, 2, 2, 3, 4, 2]) \rightarrow 2 mostNumberlnArray([1, 2, 3, 4, 5]) \rightarrow None mostNumberlnArray([1, 1, 2, 2, 3, 4, 5]) \rightarrow None