1. **Write a script that allocates array of 20 integers and initializes each element by its index multiplied by 5. Print the obtained array on the console.**
2. **Write a script that compares two char arrays lexicographically (letter by letter).**
3. **Write a script that finds the maximal sequence of equal elements in an array.**

**Example: {2, 1, 1, 2, 3, 3, 2, 2, 2, 1} 🡪 {2, 2, 2}.**

1. **Write a script that finds the maximal increasing sequence in an array. Example:   
   {3, 2, 3, 4, 2, 2, 4}** 🡪 **{2, 3, 4}.**
2. **Sorting an array means to arrange its elements in increasing order. Write a script to sort an array. Use the "selection sort" algorithm: Find the smallest element, move it at the first position, find the smallest from the rest, move it at the second position, etc.  
   Hint: Use a second array**
3. **Write a program that finds the most frequent number in an array. Example:**

**{4, 1, 1, 4, 2, 3, 4, 4, 1, 2, 4, 9, 3} 🡪 4 (5 times)**

1. **Write a program that finds the index of given element in a sorted array of integers by using the** [**binary search**](http://en.wikipedia.org/wiki/Binary_search_algorithm) **algorithm (find it in Wikipedia)**