Assignment Questions

Q1. Implement a Map in java which takes the input and print the list in sorted order based on key.

Input: 5- Rahul, 7 Lakshman, 1 Ram, 4 Krrish, 2 Lakshay
Output: {1=Ram, 2=Lakshay, 4=Krrish, 5=Rahul, 7=lakshman}

Q2. Implement a Map in java which takes the input and print the list in sorted order based on value.

Input: 5- Rahul, 7 Lakshman, 1 Ram, 4 Krrish, 2 Lakshay
Output: {Krish=4,Lakshay=2,Lakshman=7,Rahul=5,Ram=1}

Q3.Detect if an Array contains a duplicate element. At Most 1 duplicate would be there.

Input: 1,2,3,4
Output: No

Input: 1, 2, 3, 4, 1
Output: Yes.

Q4. Given an array nums of size n, return the majority element.

Input: 4,2,7,1,9
Output: 9

Q5. Given two strings ransomNote and magazine, return true if ransomNote can be constructed by using the letters from magazine and false otherwise.
Each letter in magazine can only be used once in ransomNote.

Input: ransomNote = "a", magazine = "b"
Output: false

Input: ransomNote = "aa", magazine = "ab"
Output: false