Question-: Write Code To Filter Duplicate Elements From An Array And Print As A List?

```
package simple.test;
import java.util.ArrayList;
import java.util.HashSet;
import java.util.List;
import java.util.Set;
public class findDuplicates
{
        public static void main(String[] args)
        {
                ArrayList<String> list = new ArrayList<String>();
                // Form a list of numbers from 0-9.
                for (int i = 0; i < 10; i++)
                {
                list.add(String.valueOf(i));
                }
                // Insert a new set of numbers from 0-5.
                for (int i = 0; i < 5; i++) {
                list.add(String.valueOf(i));
        }
System.out.println("Input list : " + list);
System.out.println("\nFiltered duplicates : " + processList(list));
}
public static Set<String> processList(List<String> listContainingDuplicates) {
        final Set<String> resultSet = new HashSet<String>();
        final Set<String> tempSet = new HashSet<String>();
        for (String yourInt : listContainingDuplicates) {
        if (!tempSet.add(yourInt)) {
```

```
resultSet.add(yourInt);
}
}
return resultSet;
}
}
```

Question-: Write Code To Sort The List Of Strings Using Java Collection?

```
package simple.test;
import java.util.Arrays;
public class sortStrings {
public static void main(String[] args) throws Exception
{
String[] inputList = { "Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul",
"aug", "Sep", "Oct", "nov", "Dec" };
// Display input un-sorted list.
System.out.println("-------Input List-------");
showList(inputList);
// Call to sort the input list.
Arrays.sort(inputList);
// Display the sorted list.
System.out.println("\n-------Sorted List-------");
showList(inputList);
 // Call to sort the input list in case-sensitive order.
System.out.println("\n-------Sorted list (Case-Sensitive)-------");
Arrays.sort(inputList, String.CASE_INSENSITIVE_ORDER);
// Display the sorted list.
showList(inputList);
}
```

```
public static void showList(String[] array) {
for (String str : array) {
System.out.print(str + " ");
}
System.out.println();
}
}
```

Question-: Write A Method To Check Prime No. In Java?

```
package simple.test;
import java.util.Scanner;
public class findPrime {
	public static void main(String[] args) {
		Scanner scan = new Scanner(System.in);
		System.out.print("Enter an int value : ");
		int input = scan.nextInt();
		if (checkPrime(input)) {
			System.out.println("Input value " + input + " is a prime number.");
		} else {
			System.out.println("Input value " + input+ " is not a prime number.");
		}
	}
	public static boolean checkPrime(int n) {
		if (n <= 1) {
			return false;
		}
		for (int i = 2; i < Math.sqrt(n); i++) {
			if (n % i == 0) {
				return false;
			}
```

```
        }
        return true;
    }
}
```

Question-: Write A Java Program To Find Out The First Two Max Values From An Array?

```
package simple.test;
public class findTwoMaxValue {
    public void GetTwoMaxValues(int[] nums) {
        int maxOne = 0;
        int maxTwo = 0;
        for (int n : nums) {
            if (maxOne < n) {
                maxTwo = maxOne;
                maxOne = n;
            } else if (maxTwo < n) {
                maxTwo = n;
            }
        }
        System.out.println("Max1 - " + maxOne);
        System.out.println("Max2 - " + maxTwo);
    }
    public static void main(String[] args) {
        int list[] = { 15, 24, 48, 21, 43, 11, 79, 93 };
        findTwoMaxValue max = new findTwoMaxValue();
        max.GetTwoMaxValues(list);
    }
}
```

Question-: Write A Java Program To Find The Longest Substring From A Given String Which Doesnt Contain Any Duplicate Characters?

```
package simple.test;

import java.util.HashSet;

import java.util.Set;

public class findSubstr {

private Set<String> stringSet = new HashSet<String>();

private int lstringSet = 0;

public Set<String> findStr(String input) {

// Reset instance data.

stringSet.clear();

lstringSet = 0;

// Set a boolean flag on each char's ASCII value.

boolean[] flag = new boolean[256];

int j = 0;

char[] inputCharArr = input.toCharArray();

for (int i = 0; i < inputCharArr.length; i++) {

char c = inputCharArr[i];

if (flag[c]) {

extractSubString(inputCharArr, j, i);

for (int k = j; k < i; k++) {

if (inputCharArr[k] == c) {

j = k + 1;

break;

}

flag[inputCharArr[k]] = false;

}

} else {

flag[c] = true;
```

```
}
}
extractSubString(inputCharArr, j, inputCharArr.length);
return stringSet;
}
private String extractSubString(char[] inputArr, int start, int end) {
StringBuilder sb = new StringBuilder();
for (int i = start; i < end; i++) {
sb.append(inputArr[i]);
}
String subStr = sb.toString();
if (subStr.length() > lstringSet) {
lstringSet = subStr.length();
stringSet.clear();
stringSet.add(subStr);
} else if (subStr.length() == lstringSet) {
stringSet.add(subStr);
}
return sb.toString();
}
public static void main(String a[]) {
findSubstr substr = new findSubstr();
System.out
.println("Actual Strings ---------- | ---- Longest Non-Repeated Strings");
System.out.println("Software_Programmer"+ "        |        " + substr.findStr("Software_Programmer"));
System.out.println("Software_Developer_In_Test"+  "  |        " +
substr.findStr("Software_Developer_In_Test"));
System.out.println("developers_write_unit_tests"+  " |        " +
substr.findStr("developers_write_unit_tests"));
```

```
System.out.println("javajavbasp.net"+  "            |        " + substr.findStr("javajavbasp.net"));
}
}
```

Question-: Write Java Code To Get Rid Of Multiple Spaces From A String?

```
package simple.test;
import java.util.StringTokenizer;
public class removeExtraSpaces {
   public static void main(String args[]){
      String input = "Try    to    remove   extra   spaces.";
      StringTokenizer substr = new StringTokenizer(input, " ");
      StringBuffer sb = new StringBuffer();
      while(substr.hasMoreElements()){
         sb.append(substr.nextElement()).append(" ");
      }
      System.out.println("Actual string: " + input);
      System.out.println("Processed string: " + sb.toString().trim());
   }
}
```

Question-: Write A Java Program To Demonstrate String Reverse With And Without StringBuffer Class?

```
package simple.test;
public class invertString {
public String invertWithStringBuffer(String str) {
StringBuffer buffer = new StringBuffer(str);
buffer.reverse();
return buffer.toString();
}
public String invertWithoutStringBuffer(String str) {

int length = str.length();
```

```
String original = str;

String invert = "";

for (int i = length - 1; i >= 0; i--) {

invert = invert + original.charAt(i);

}

return invert;

}

public static void main(String[] args) {

invertString invertStr = new invertString();

System.out.println("Inverted String with StringBuffer class:
"+invertStr.invertWithStringBuffer("987654321"));

System.out.println("");

System.out.println("Inverted String without StringBuffer class: "

+ invertStr.invertWithoutStringBuffer("kjihgfedcba"));

}

}
```