

## FindMissingInt

```
public static int findMissingInt (int [] array) {  
    if (array.length == 1) return (array[0] + 1);  
    int missing = 0;  
    int max = 0;  
    boolean foundM = false;  
    for (int i = 0; i < array.length; i++) {  
        for (int j = 0; j < array.length; j++) {  
            if (array[i] + 1 == array[j]) {  
                break;  
            }  
            max = Math.max(array[j], max);  
            if (j == array.length - 1 && i != array.length - 1) {  
                missing = array[i] + 1;  
                foundM = true;  
            }  
        }  
        if (max < missing) return 0;  
        if (foundM) break;  
    }  
    return missing;  
}
```

secondMaxValue

```
public static int secondMaxValue(int [] array) {
    int max = array[0];
    int max2 = Math.min (array[0], array [1]);
    for (int i = 0; i < array.length; i++) {
        for (int j = 0; j < array.length; j++) {
            max = Math.max(max, Math.max(array[i], array[j]));
            if (array[j] < max) {
                max2 = Math.max(max2, array[j]);
            }
            if (array[i] == array[j] && array[j] == max && i > 0 &&
                i != j) return max;
        }
        if (max2 == max) {
            max2 = Math.min(max2, array[i]);
        }
    }
    return max2;
}
```

containsTheSameElement

```
public static boolean containsTheSameElements(int [] array1,
                                              int [] array2) {

    boolean isThere = false;
    for (int i = 0; i < array1.length; i++) {
        for (int j = 0; j < array2.length; j++) {
            if (array1[i] == array2[j]) {
                isThere = true;
            }
        }
        if (!isThere) return false;
        isThere = false;
    }
    return true;
}
```

IsSorted

```
public static boolean isSorted(int [] array) {  
    int dir = 0; //is 0 if array is going down or 1 if array is  
                //going up and 2 if a started with equal numbers  
    for (int i = 0; i < array.length - 1; i++) {  
        if ((i == 0 || dir == 2) && array[i] > array[i+1]) {  
            dir = 0;  
        } else if ((i == 0 || dir == 2) && array[i] < array[i+1]) {  
            dir = 1;  
        } else if (i == 0 || dir == 2) {  
            dir = 2;  
        }  
        if (array[i] > array[i+1] && dir == 1) {  
            return false;  
        } else if (array[i] < array[i+1] && dir == 0) {  
            return false;  
        }  
    }  
    return true;  
}
```

## CapVowelsLowRest

```
public static String capVowelsLowRest (String string) {
    String s = "";
    for (int i = 0; i < string.length(); i++) {
        if (string.charAt(i) >= 65 && string.charAt(i) <= 90) {
            if (string.charAt(i) == 'A' || string.charAt(i) == 'I'
                || string.charAt(i) == 'O' || string.charAt(i) ==
                'E' || string.charAt(i) == 'U' ) {
                s += string.charAt(i);
            } else {
                s += (char)(string.charAt(i) + 32);
            }
        } else if (string.charAt(i) >= 97 && string.charAt(i) <=
            122) {
            if (string.charAt(i) == 'a' || string.charAt(i) == 'i'
                || string.charAt(i) == 'o' || string.charAt(i) ==
                'e' || string.charAt(i) == 'u' ) {
                s += (char)(string.charAt(i) - 32);
            } else {
                s += string.charAt(i);
            }
        } else {
            s += string.charAt(i);
        }
    }
    return s;
}
```

## CamelCase

```
public static String camelCase (String string) {
    String s = "";
    boolean first = true;
    for (int i = 0; i < string.length(); i++) {
        if (s == "") first = true;
        if (string.charAt(i) == ' ') {
            first = false;
        }
        if (first == true) {
            if (string.charAt(i) >= 65 && string.charAt(i) <= 90)
            {
                s += (char)(string.charAt(i) + 32);
            } else if (string.charAt(i) >= 97 && string.charAt(i)
                <= 122) {
                s += string.charAt(i);
            }
        } else {
            if (string.charAt(i - 1) == ' ') {
                if (string.charAt(i) >= 65 && string.charAt(i) <=
                    90) {
                    s += string.charAt(i);
                } else if (string.charAt(i) >= 97 &&
                    string.charAt(i) <= 122) {
                    s += (char)(string.charAt(i) - 32);
                }
            }
            } else if (string.charAt(i) >= 65 && string.charAt(i)
                <= 90) {
```

```
        s += (char)(string.charAt(i) + 32);
    } else if (string.charAt(i) >= 97 && string.charAt(i)
        <= 122) {
        s += string.charAt(i);
    }
}
return s;
}
```

AllIndexOf

```
public static int[] allIndexOf (String string, char chr) {  
    int cnt = 0;  
    int iCount = 0;  
    for (int i = 0; i < string.length(); i++) {  
        if (string.charAt(i) == chr) {  
            cnt++;  
        }  
    }  
    int[] indexOf = new int[cnt];  
    for (int i = 0; i < string.length(); i++) {  
        if (string.charAt(i) == chr) {  
            indexOf[iCount] = i;  
            iCount++;  
        }  
    }  
    return indexOf;  
}
```