

```
public class ArrayOps {  
    public static void main(String[] args) {  
        int[] array = {1, 3, 2};  
  
        System.out.println(isSorted(array));  
  
    }  
  
    public static int findMissingInt (int [] array) {  
        int N = array.length;  
        int missingNum = 0;  
        int[] temp = new int[N+1];  
        for (int i = 0; i < N; i++) {  
            temp[array[i]]++;  
        }  
        for (int j = 0; j < N+1; j++) {  
            if (temp[j] == 0) {  
                missingNum = j;  
            }  
        }  
        return missingNum;  
    }  
  
    public static int secondMaxValue(int [] array) {  
        int max = Integer.MIN_VALUE;  
        int secMax = Integer.MIN_VALUE;  
  
        for (int i = 0; i < array.length; i++) {  
            if (array[i] > max) {  
                secMax = max;  
                max = array[i];  
            } else if (array[i] != max || array[i] > secMax) {  
                secMax = array[i];  
            }  
        }  
        return secMax;  
    }  
}
```

```
public static boolean containsTheSameElements(int [] array1,int [] array2) {  
    for (int i = 0; i < array1.length; i++) {  
        for (int j = 0; j < array2.length; j++) {  
            if (array1[i] == array2[j]){  
                break;  
            }  
            else if (j == array2.length - 1) {  
                return false;  
            }  
        }  
    }  
    for (int i = 0; i < array2.length; i++) {  
        for (int j = 0; j < array1.length; j++) {  
            if (array2[i] == array1[j]){  
                break;  
            }  
            else if (j == array1.length - 1) {  
                return false;  
            }  
        }  
    }  
    return true;  
}
```

```

public static boolean isSorted(int [] array) {
    int num1 = array[0];
    int num2 = array[1];
    boolean decrease = (num1 <= num2);
    boolean Increase = (num1 >= num2);

    if (decrease){
        for (int i = 1; i < array.length - 1; i++){
            num1 = num2;
            num2 = array[i+1];
            if (num1 >= num2){
                return false;
            }
        }
    }
    else if (Increase){
        for (int i = 1; i < array.length - 1; i++){
            num1 = num2;
            num2 = array[i+1];
            if (num1 <= num2){
                return false;
            }
        }
    }
    return true;
}

}

public class StringOps {
    public static void main(String[] args) {
        String string = "MMMM";
        char chr = 'M';
        int[] result = allIndexOf(string, chr);

        for (int i = 0; i < result.length; i++) {
            System.out.print(result[i]);
            if (i < result.length - 1) {
                System.out.print(" ");
            }
        }
    }
}

```

```

public static String capVowelsLowRest (String string) {
    String ans = "";
    for (int i = 0; i < string.length(); i++) {
        char ch = string.charAt(i);
        if ((ch >= 65) && (ch <= 90)){ //if big letter
            if (ch == 65 || ch == 69 || ch == 73 || ch == 79 || ch == 85){ //if aeiou
                ans = ans + ch; //add as is
            }
            else{
                ans = ans + ((char)(ch + 32)); //add as lowercase
            }
        }
        else if ((ch >= 97) && (ch <= 122) || ch == 32){
            if (ch == 97 || ch == 101 || ch == 105 || ch == 111 || ch == 117)
                // if small letter or space
                ans = ans + ((char)(ch - 32)); //add as uppercase
            }
            else {
                // if its any other char
                ans = ans + ch; // add as is
            }
        }
    }
    return ans;
}

```

```

public static String camelCase (String string) {
    int i = 0;
    int length = string.length();

    while (i < length && string.charAt(i) == ' ') { //if the string starts with
spaces we will skip them
        i++;
    }

    String ans = "";
    while (i < length) {

        char ch = string.charAt(i);

        if (ch == ' '){

            while (i < length && string.charAt(i) == ' ') { //if there are spaces we will
skip them
                i++;
            }

            if (i < length){
                ch = string.charAt(i);
                if (ch >='a' && ch <='z'){
                    ans += (char)(ch - 32);
                }else {
                    ans += ch;
                }
            }
            i++;
        }
        else if (ch >= 'A' && ch <= 'Z'){
            ans += (char)(ch + 32);
            i++;
        }
        else {
            ans += ch;
            i++;
        }
    }
    return ans;
}

```

```
public static int[] allIndexof (String string, char chr) {  
    int count = 0;  
    for (int i = 0; i < string.length(); i++) {  
        if (string.charAt(i) == chr) {  
            count++;  
        }  
    }  
  
    int[] ans = new int[count];  
    int currentIndex = 0;  
  
    for (int i = 0; i < string.length(); i++) {  
        if (string.charAt(i) == chr) {  
            ans[currentIndex] = i;  
            currentIndex++;  
        }  
    }  
  
    return ans;  
}
```