

```

1. public class ConstructorExample {
    public ConstructorExample() {
        System.out.println("No arguments constructor called");
    }
    public ConstructorExample(int defaultValue) {
        System.out.println("Default constructor called with default value: " + defaultValue);
    }
    public ConstructorExample(String strParam) {
        System.out.println("Parameterized constructor called with String parameter: " + strParam);
    }

    public ConstructorExample(int intParam1, int intParam2) {
        System.out.println("Parameterized constructor called with two int parameters: " + intParam1 + ", " + intParam2);
    }

    public static void main(String[] args) {
        ConstructorExample obj1 = new ConstructorExample();
        ConstructorExample obj2 = new ConstructorExample(10);
        ConstructorExample obj3 = new ConstructorExample("Hello");
        ConstructorExample obj4 = new ConstructorExample(5, 7);
    }
}

```

```

2. public class RemoveDuplicates {

    public static int removeDuplicates(int[] nums) {
        if (nums.length == 0) {
            return 0;
        }

        int uniqueCount = 1;
        for (int i = 1; i < nums.length; i++) {
            if (nums[i] != nums[i - 1]) {
                nums[uniqueCount] = nums[i];
                uniqueCount++;
            }
        }

        return uniqueCount;
    }

    public static void main(String[] args) {
        int[] inputArray = {22, 22, 77, 77, 88, 89, 89};
        int uniqueCount = removeDuplicates(inputArray);
        System.out.print("After removing duplicates -> [");
        for (int i = 0; i < uniqueCount; i++) {
            System.out.print(inputArray[i]);

```

```

        if (i < uniqueCount - 1) {
            System.out.print(", ");
        }
    }
    System.out.println("]");
    System.out.println("No. of unique elements = " + uniqueCount);
}
}

3. public class RearrangeArray {
    public static void rearrangeArray(int[] nums) {
        int negativePointer = 0;
        for (int i = 0; i < nums.length; i++) {
            if (nums[i] < 0) {
                swap(nums, i, negativePointer);
                negativePointer++;
            }
        }
    }

    private static void swap(int[] nums, int i, int j) {
        int temp = nums[i];
        nums[i] = nums[j];
        nums[j] = temp;
    }

    public static void main(String[] args) {
        int[] inputArray = {-12, 11, -13, -5, 6, -7, 5, -3, -6};
        rearrangeArray(inputArray);
        System.out.print("Output [");
        for (int i = 0; i < inputArray.length; i++) {
            System.out.print(inputArray[i]);
            if (i < inputArray.length - 1) {
                System.out.print(", ");
            }
        }
        System.out.println("]");
    }
}

```