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Programming Patterns  
420-301-VA  
Section 01  
Assignement 2

## Question 1 :

```
5  |  */
6  |  package assignment2;
7  |
8  |  import java.util.Arrays;
9  |
10 |  /**
11 |   * The square of each number sorted in non-decreasing order
12 |   * @author Kosta Nikopoulos
13 |   */
14 |  public class Q1 {
```

---

Output - Assignment2 (run) ×

run:  
0 1 9 16 100 BUILD SUCCESSFUL (total time: 0 seconds)

## Question 2 :

```
6  |  package assignment2;
7  |
8  |  /**
9  |   * The square of each number sorted in non-decreasing order
10 |   * DIFFERENT APPROACH
11 |   * @author Kosta Nikopoulos
12 |   */
13 |  public class Q2 {
14 |
```

---

Output - Assignment2 (run) ×

run:  
0 1 9 16 100 BUILD SUCCESSFUL (total time: 0 seconds)

**Question 3 :**

```

6   package assignment2;
7
8   import java.util.*;
9
10  /**
11   * Moving the 0s to the end of the list
12   * @author Kosta Nikopoulos
13   */
14  public class Q3 {
15

```

Output - Assignment2 (run) ×

```

run:
Enter the list :
0 1 0 3 12 g
1 3 12 0 0 BUILD SUCCESSFUL (total time: 31 seconds)

```

**Question 4 :**

```

5   /**
6   package assignment2;
7
8   import java.util.ArrayList;
9   import java.util.Arrays;
10  import java.util.List;
11
12  /**
13   * Minimizing the total amount of operations
14   * @author Kosta Nikopoulos
15   */

```

Output - Assignment2 (run) ×

```

run:
Original list: [0, 1, 0, 3, 12]
Result list: 1 3 12 0 0
BUILD SUCCESSFUL (total time: 0 seconds)

```

### Question 5 :

```
6 package assignment2;
7
8 import java.util.Arrays;
9 import java.util.Collections;
10 import java.util.List;
11
12 /**
13  * Sorting and Merging Integer lists
14  * @author Kosta Nikopoulos
15  */
16 public class Q5 {
17
```

Output - Assignment2 (run) ×

run:  
[1, 2, 2, 3, 5, 6]  
BUILD SUCCESSFUL (total time: 0 seconds)

### Question 6 :

```
6 package assignment2;
7
8 import java.util.Arrays;
9 import java.util.List;
10
11 /**
12  * Sorting and Merging Integer lists
13  * DIFFERENT APPROACH
14  * @author Kosta Nikopoulos
15  */
16 public class Q6 {
17
```

Output - Assignment2 (run) ×

run:  
[1, 2, 2, 3, 5, 6]  
BUILD SUCCESSFUL (total time: 0 seconds)