Lab Assignment 08

2019 – 2020 Spring, CMPE 112 Fundamentals of Programming I

Question 1 (35 pts)

Write a Java program that reads integers from the user then prints the reverse of the first half of the given numbers. You should use an array for reading the numbers from the user, and then create a second array with the same length as the input. Then, put the reverse of the first part of the numbers into the second array.

Note: the size of the array will be decided by user. See example runs below.

```
Enter the size of array:
7
Enter the numbers:
1 2 3 4 5 6 7
Reverse of the array: 3 2 1 4 5 6 7
```

```
Enter the size of array:
6
Enter the numbers:
17 32 45 98 65 3
Reverse of the array: 45 32 17 98 65 3
```

Question 2 (35 pts)

Write a java program that reads integers from the user then prints the given numbers divided as divisible by 3 and divisible by 7. You should first use an array for reading the numbers from the user. Then, you should distribute this array into three arrays, for holding numbers divisible by 3, divisible by 7, and divisible by neither 3 nor 7.

Hint: When initializing your arrays, you do not know how many numbers divisible by 3 or 7 will be entered, but you know the total number of values, so create the arrays for the worst-case scenario. That is, create three arrays in addition to the array used for reading input, with the same size as the input. Keep three counters for keeping track the number of integers in these three arrays.

Note: the size of the array will be decided by user. See example runs below.

```
How many numbers will you enter:
7
Enter the numbers:
1 2 3 4 5 6 7
Numbers divided by three: 3 6
Numbers divided by seven: 7
Numbers not divided by three or seven: 1 2 4 5
```

```
How many numbers will you enter:
8
Enter the numbers:
7 4 -5 15 14 30 77 6
Numbers divided by three: 15 30 6
Numbers divided by seven: 7 14 77
Numbers no divided by three or seven: 4 -5
```