Data Structures – ITCS 2214

Homework #1

Instructions

Create a program (driver) that generates fifty random numbers in the 1 – 100 (inclusive) range. Your program should store those numbers into an array. The program should then create a chart showing how often a range of numbers is represented (see chart below). For example, if three of the fifty random numbers are between 11 and 20, there should be three \* marks in the 11-20 row.

There are several different ways to design this program. It is up to you to choose how you will use arrays and variables to achieve the desired outcome.

**Due via Moodle the day before our next class at 11:55pm. Submit only your .JAVA file**

Creating Random Number

import java.util.Random;

Random r = new Random();

int randNum1 = r.nextInt(50); //generates random number between 0-49

int randNum2 = r.nextInt(100); //generates random number between 0-99

int randNum3 = r.nextInt(30) + 10; //generates random number between 10-39

1 – 10 | \*\*\*\*\*\*

11 – 20 | \*\*\*

21 – 30 | \*\*\*

31 – 40 | \*\*\*\*\*\*\*\*\*\*

41 – 50 | \*\*\*\*

51 – 60 |

61 – 70 | \*

71 – 80 | \*\*\*\*\*\*

81 – 90 | \*\*\*

91 – 100 | \*\*\*\*