Java Assignments Questions 6th Semester

**Submission Date: 29-1-18**

Program to print a pattern, that displays the multiples of a number as shown in the example below. Eg: If a user enters 5, then 5\*5 a matrix is created with multiples of 5.

5

10 15

20 25 30

35 40 45 50

55 60 65 70 75

1. Calculate area of a shape using command line arguments. The shapes to be included are triangle, circle, square and rectangle. Make use of OOP concepts like abstract class, method overriding or overloading. Make use of Math class wherever applicable.
2. Take an integer as an input from command line and break into individual digits.
3. Program for validating an E-Mail Address.
4. Counting the number of occurrence of integer.
5. Getting the Maximum and Minimum Value from a 2D array.
6. Construct a 2-D array with sum of indices as elements.
7. Demonstrate a Multi-Dimensional Array.
8. Number Guessing Game. Where the user enters any random number, and the system checks for its equality by creating a system’s random number, if the numbers are same, declare as winner. Make user defined exception, for displaying an error as “Please enter a numeric value!!!”, if user enters a nonnumeric value.
9. Demonstrate String Class functions.
10. Display Sin and Cos for :0 30 45 60 90
11. W.a.p to demonstrate bubble Sorting.
12. Count the occurrences of characters from files.
13. Demonstrate Random Access files.
14. Count the number of words using String tokenizer.
15. Count the Occurrence of characters using String Tokenizer.
16. Make a library management system with basic functions as follows:
    1. Book addition
    2. Book deletion
    3. Book search by name, author or ISSN no.
    4. Book issue to a student.
    5. Display the books issued to a student with student name or roll number.
17. Demonstrate serilization by making Student class in the above program serializable. Also demonstrate de-serialization.
18. Demonstrate PrintWriter class in the library management program.

Note :

Enclose the code block with try-catch where ever applicable

Write the Program question, Qno., Roll no and Name at the top of the program in comment.