Velammal College of Engineering and Technology, Madurai
Department of Computer Science and Engineering
Object oriented programming lab

Exercise 3
Static Members

Team 1
1. Write a static method max3() that takes three int arguments and returns the value of the largest one. Add an overloaded method that does the same thing with three double values.
2. Write a program to compute series harmonic numbers using static method and get the input using command line argument.
   1/1 + 1/2 + … + 1/n.
3. Write a program for performing counter function using static and non static variable.

Team 2
1. Write a static method int mod(int a, int n), where a is an integer and n is a positive integer, and returns a mod n. This corresponds to a % n when a is positive, but if a is negative, a % n returns a non-positive integer.
2. Write a static method eq() that takes two int arrays as arguments and returns true if the arrays have the same length and all corresponding pairs of elements are equal, and false otherwise.
3. Write a program for performing counter function using static and non static variable.

Team 3
1. Write a static method majority() that takes three boolean arguments and returns true if at least two of the arguments are true, and false otherwise.
2. Write a program for performing counter function using static and non static variable.
3. Write a static method nint() that takes a real number as a parameter and returns the nearest integer.

Team 4
1. Write a program for performing counter function using static and non static variable.
2. Write a program to create a student class having name, rollno and college name as data members. Create array of objects for student class. Consider college name as static.
3. Write a static method to read 1D, 2D and 3D arrays of integers from standard input and printing them out to standard output.

Team 5
1. Write a static method reverse1() that takes a integer array as an argument and creates a new array with the entries in reverse order .
2. Write a static method computes the mean (average) value of an array of double values pass array as argument.
3. Write a program for performing counter function using static and non static variable.

Team 6

1. Write a static method areTriangular() that takes three double values as arguments and returns true if they could be the sides of a triangle (none of them is greater than or equal to the sum of the other two).
2. Write a static method sigmoid() that takes a double argument x and returns the double value obtained from the formula: $1 / (1 - e^{-x})$.
3. Write a program for performing counter function using static and non static variable.

Team 7

1. Write a program Calendar that takes two command-line arguments m and y and prints out the monthly calendar for the mth month of year y, as in this example:

```
    February 2009
 S  M Tu  W Th  F  S
 1  2  3  4  5  6  7
 8  9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
```

2. Minimum of four numbers
3. Write a program for performing counter function using static and non static variable.