## **Java Class Demos**

1. Hello World Program in Java
2. Adding 2 numbers by passing from command line
3. Sum of n numbers Passed from command line.
4. Maximum and minimum number from array of numbers.

## **Java Assignments**

## **Chapter: Java Language Constructs**

## **Level : Beginner**

1. Check if a nonzero positive number entered from command line is odd or even. if user enters an invalid an error message is printed.

**public** **class** Example1 {

**public** **static** **boolean** isEvenOrOdd(**int** n)

{

**// your code**

}

**public** **static** **void** main(String[] args) {

**int** n = Integer.*parseInt*(…);

**if**(n > 0)

System.***out***.println(*isEvenOrOdd*(n));

**else**

System.***out***.println("Invalid");

}

}

1. Create a Java application that has the following functionalities
   1. Checking for a prime number
   2. Generating Prime Numbers from lowerlimit to upperlimit that are passed as parameters.

Create a class PrimeGen that has 2 methods isPrime(..) and genPrime(..) for the above functionalities.

1. Write a Java program that prints day of the week when user inputs a number from keyboard.
   1. Ex: 0 is for Sunday
   2. Optimize the code without using switch case.

Hint : use below code to read from keyboard

System.***out***.println("Enter a number [0-6]");

**int** n = **new** Scanner(System.***in***).nextInt();

1. A company insures it’s employees if any of the following criteria is met by them.
   1. Employee is UnMarried
   2. Employee is Married Male above 30 years of age.
   3. Employee is Married Female above 25 years of age.

(Values are entered from command line: Ex :’U’ or M female 26 so on.

Write a java program to display message if the employee is insured or not

(Use Logical Operators for compact code)

1. Write a java method to implement Linear Search on an array of numbers.

public static int liSearch(int numbers[],int key) that returns the position of the key element or -1. Test with a main method.

1. Write a java method to implement Binary Search on an array of numbers.

public static int biSearch(int numbers[],int key) that returns the position of the key element or -1. Test with a main method.

(numbers need to be sorted for Binary Search)