***Exception Handling and Assertion***

**1. Write Java Program to accept a number from user, if number is zero throw user defined exception "Number is 0" otherwise check whether no. is prime or not(use static keyword).**

**2. Write class Student with attributes roll no, name, age and course. Initialize values through parameterized constructor. If age of student is not in between**

**15 and 21 then generate user defined exception "Age Not within Range". If name contains numbers or special symbols, raise exception "Name not Valid".**

**3. Write a Java Program to find the exception Marks Out of Bounds. Create a class Student. If mark is greater than 100, it must generate user defined exception called Mark Out of Bounds Exception and throw it.**

**4. Find out maximum of array elements and check for array limit.**

**5. Write a class Account with acc\_no, name and balance. Initialize values through parameterized constructor. If balance is between 1000 and 5000, generate user defined exception "Balance within the range". If name contains digits, raise exception "Name not Valid".**

**6. Class ExceptionDemo throws following exception depending upon following condition:**

**Take any integer from the keyboard.**

**If the integer is between 0 and 5, exception of type "Small Number" is thrown.**

**If the number is between 5 and 10,"Proper Number" is thrown.**

**If the number is greater than 10,"Greater Number" is thrown.**

**Also find the factorial of that number(using static keyword).**

**7. Class ExceptionDemo throws the following exception depending upon the following conditions. Take any string from the keyboard.**

**If string length is between 0 and 5, then Exception "too small string" is thrown.**

**If string length is between 5 and 10, then exception to type "Perfect String" is thrown.**

**8. Program which accepts string from user. If string contains word "India", raise an exception.**

**9. Write a Java program to find sum of integer from command line argument and count invalid integers through command line(Use Exception Handling).**

**10.Write a program in Java to check if entered data is alphabet or digit. If it is alphabet, then print if it is capital or small case. If digit is entered throw user defined exception "digit not allowed".**

**11.Write program demonstrating nested try blocks and multiple catch statements and using throw and throws and finally keywords.**