1. Implement a Java program to read a number to a file called as "**Input.txt**". Read the number from the file and check whether it is an Armstrong number or not. The output should be displayed in a file called as "**Output.txt**".

2. Implement a Java program that implements a multi-threaded program which has three threads. First thread generates a random integer every 1 second. If the value is even, second thread calculates the factorial of that number. If the value is odd the third thread will display the square root of that number.

3. Implement a Swing program with the layout given below. When the user enters a number in the first text field and clicks the button labelled "**Calculate**" the program should check whether the number is prime or not and must display the result in the second text field.