Lab Assignment -4 II MCA OOP Lab

1. Write a java program to create three threads using the Thread class. These three threads should calculate the sum of numbers from 1 to 5, 6 to 10, and 11 to 15, respectively. After all threads finish, the main thread should print the sum and average
2. Write a multi-threaded Java program to print all numbers below 100,000 that are both prime and fibonacci number (some examples are 2, 3, 5, 13, etc.). Design a thread that generates prime numbers below 100,000. Design another thread that generates fibonacci numbers. The main thread should read both the results to identify numbers common to both.
3. Write a class whose objects hold a current value and have a method that will add to that value, printing the new value. Write a program that creates such an object, creates multiple threads, and invokes the adding method repeatedly from each thread.
4. Write a java program that prints the elapsed time each second from the start of execution, with another thread that prints a message every fifteen seconds. Have the message-printing thread be notified by the time-printing thread as each second passes by. Add another thread that prints a different message every seven seconds without modifying the time-printing thread.
5. Write a java program to solve producer consumer problem using threads.