Write a JAVA program that generate multiple threads to perform given independent tasks. Each thread is responsible for performing a different operations. After each thread has completed its operation, the program should collect the results from all threads and aggregate them to produce a final output.

Ans= mux(num) + cubeEach(num)+ fact(num)

Where mux() is responsible to separate each digit and perform multiplication.

cubeEach() is responsible to separate each digit, perform cube on each digit and make addition.

fact() is responsible to calculate factorial of given number

Suppose you are building a multi-threaded application for a bank that processes customer transactions. The application has a shared account object that represents a customer's bank account. The account object has a balance field that stores the current balance of the account.

Multiple threads run concurrently in the application, and each thread represents a customer who performs a transaction. Each transaction involves deducting or adding a certain amount of money from the account balance.

When one thread is modifying the account balance, no other thread should be able to read or modify the balance field simultaneously.

Note: Use synchronized keyword

Write a generic method to count the number of elements in a collection that have a specific property (for example, odd integers, prime numbers, palindromes).

Write a generic method to exchange the positions of two different elements in an array.

Write a class which performs numerical operations. The constraint on this class is that it should accept only Number and its subtype of values. Then you add a constructor to this class which accepts multiple values for your operands and initializes the corresponding instance variable in your class. After this, you need to add a method which will return you a sorted list of the numbers. Then add yet another method to calculate the maximum value among them.

Write a program to create generic class to perform addition of two values.

Values can be of any data type. In case of String data type it should perform concatenation.