import com.mongodb.\*;

import java.util.\*;

public class connection

{

  public static void main( String args[] )

  {

           try

           {

              MongoClient mongoClient = new MongoClient( "localhost" , 27017 );

              DB db = mongoClient.getDB( "assn12" );

              System.out.println("Connect to database successfully");

              while(true)

              {

                  System.out.println("\n1. Create Collection\n 2. Insert Document\n 3. Update Document\n 4. Remove Document\n 5. Exit\n");

                  Scanner in =new Scanner(System.in);

                  String ch;

                  ch=in.nextLine();

                  switch(ch)

                  {

                 case "1":

                 DBCollection coll = db.createCollection("stud", null);

                         System.out.println("Collection created successfully");

                         DBCollection coll1 = db.getCollection("stud");

                         System.out.println("Collection stud selected successfully");

                         break;

                 case "2":

                 coll=db.getCollection("stud");

                         BasicDBObject doc = new BasicDBObject("Title", "MongoDB").

                         append("roll\_no", 233).

                         append("grade", "A+").

                         append("url", "http://www.docs.mongodb.org/").

                         append("Marks", "100");

                         coll.insert(doc);

                         System.out.println("Document inserted successfully");

                         System.out.println("Documents in collection are as follows");

                         DBCursor cursor =  coll.find();

                         int i=1;

                         while (cursor.hasNext())

                         {

                        System.out.println("Inserted Document: "+i);

                             System.out.println(cursor.next());

                             i++;

                         }

                         break;

                 case "3":

                 coll=db.getCollection("stud");

                         doc = new BasicDBObject("Title", "MongoDB").

                         append("roll\_no", 233).

                         append("grade", "A+").

                         append("url", "http://www.docs.mongodb.org/").

                         append("Marks", "100");

                         BasicDBObject doc1=new BasicDBObject("name", "xyz").

                         append("roll\_no", 340).

                         append("grade", "A");

                         coll.update(doc,doc1);

                         cursor =  coll.find();

                         i=1;

                         while (cursor.hasNext())

                         {

                        System.out.println("Inserted Document: "+i);

                        System.out.println(cursor.next());

                        i++;

                         }

                         break;

                 case "4":

                 coll=db.getCollection("stud");

                 DBObject mydoc=coll.findOne();

                 coll.remove(mydoc);

                 cursor=coll.find();

                 int i1=1;

                 while (cursor.hasNext())

                 {

                 System.out.println("Inserted Document: "+i1);

                 System.out.println(cursor.next());

                 i1++;

                 }

                 System.out.println("Document deleted successfully");

                 break;

                 case "5":

                 System.out.println("Exit....");

                 System.exit(0);

                   }

               }

           }

           catch(Exception e)

           {

              System.err.println( e.getClass().getName() + ": " + e.getMessage() );

           }

   }

}