Student Info

```
package studentprog;
import java.util.*;
public class Student {
   String usn, name, branch;
   long phone;
   public void insertStudent(String reg, String nm, String br, long ph) {
      usn = reg;
      name = nm;
      branch = br;
      phone = ph;
}
   public void displayStudent() {
      System.out.println("**********************");
      System.out.println("USN = " + usn);
      System.out.println("Name = " + name);
      System.out.println("Branch = " + branch);
      System.out.println("Phone no = " + phone);
   }
   public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      System.out.println("Enter the number of students: ");
      int n = sc.nextInt();
      Student st[] = new Student[n];
      System.out.println("Enter the USN, Name, Branch, and Phone number of students:");
      for (int i = 0; i < n; i++) {
         st[i] = new Student();
         System.out.println("Student " + (i + 1) + " details: ");
         String usn = sc.next();
         String name = sc.next();
         String branch = sc.next();
         long phone = sc.nextLong();
         st[i].insertStudent(usn, name, branch, phone);
      }
      System.out.println("\nStudent Details:");
      for (int i = 0; i < n; i++) {
         st[i].displayStudent();
      }
      sc.close();
   }
```

Try Catch

```
package Trycatch;
import java.util.Scanner;
public class divide {
   void div(int a, int b) {
      try {
         int c = a / b;
         System.out.println("Result = " + c);
      } catch (ArithmeticException e) {
         System.out.println("Cannot divide by zero");
      }
   }
   public static void main(String[] args) {
      Scanner in = new Scanner(System.in);
      System.out.print("Enter values of a & b: ");
      int num1 = in.nextInt();
      int num2 = in.nextInt();
      divide obj = new divide();
      obj.div(num1, num2);
      in.close();
   }
}
```

Multithread

```
package Multithread;
import java.util.Random;
class Square extends Thread {
   int x;
   Square(int n) {
      x = n;
   }
   public void run() {
      int sqr = x * x;
      System.out.println("Square of " + x + " = " + sqr);
   }
}
class Cube extends Thread {
   int x;
   Cube(int n) {
      x = n;
   }
   public void run() {
      int cube = x * x * x;
      System.out.println("Cube of " + x + " = " + cube);
   }
}
class RNumber extends Thread {
   public void run() {
      Random random = new Random();
      for (int i = 0; i < 5; i++) {
         int randomInteger = random.nextInt(10) + 1;
         System.out.println("Random Integer generated: " + randomInteger);
         Square s = new Square(randomInteger);
         s.start();
```

```
            Cube c = new Cube(randomInteger);
            c.start();
            try {
               Thread.sleep(1000);
            } catch (InterruptedException e) {
               System.out.println(e);
            }
         }
      }
   }
public class ThreadExample {
   public static void main(String[] args) {
      RNumber n = new RNumber();
      n.start();
   }
}
```