**package danji;**

**import java.util.Arrays;**

**import java.util.Random;**

**public class Estimate {**

**//密钥总长度**

**int n = 10000;**

**//误码率**

**double p =0.01;**

**//Alice的密钥**

**int[] aliceKeys;**

**//Bob的密钥**

**int[] bobKeys;**

**//用于产生随机数**

**Random r = new Random();**

**//误码估计**

**public Estimate(int[] aliceKeys, int[] bobKeys, int n, double p) {**

**this.aliceKeys = Arrays.copyOf(aliceKeys, aliceKeys.length);**

**this.bobKeys = Arrays.copyOf(bobKeys, bobKeys.length);**

**this.n = n;**

**this.p = p;**

**double p2=0;**

**for (int num = 0; num < 5; num++) {**

**int ran=r.nextInt(n-99);**

**//随机产生密钥100比特开始开始位置**

**int m=0;**

**for(int i=ran;i<ran+100;i++){**

**m+=(aliceKeys[i]^ bobKeys[i]);**

**}//循环5次，每次抽一百进行异或运算，当有不同的时候进行计数**

**p2+=m;//把五次循环的错误个数相加**

**}**

**p2=p2/5\*0.01;//再除以5，乘上百分比作为误码率**

**System.out.println("误码率约为: "+p2);**

**}**

**}**