

```

1447 //Even Odd Thread
1448 import java.util.*;
1449 class thread implements Runnable{
1450     Thread t;
1451     int i,j=0;
1452     thread(){
1453         t=new Thread(this);
1454         t.start();
1455     }
1456     public void run(){
1457         try{
1458             for(int i=1;i<100;i=i+2){
1459                 j=j+i;
1460             }
1461             Thread.sleep(3000);
1462             System.out.println("\nSum of Odd numbers from 1 to 100 is : "+j);
1463         }
1464         catch (InterruptedException e) {
1465             System.out.println("Child thread was interrupt..");
1466         }
1467         System.out.println("Child thread exiting..");
1468     }
1469 }
1470
1471 class Series{
1472     public static void main(String args[]){
1473         int l=0;
1474         new thread();
1475         try{
1476             for(int i=2;i<101;i=i+2){
1477                 l=l+i;
1478             }
1479             Thread.sleep(100);
1480             System.out.println("\nSum of Even numbers from 1 to 100 is : "+l);
1481         }
1482         catch (InterruptedException e) {
1483             System.out.println("Main thread was interrupted..");
1484         }
1485         System.out.println("Main thread exiting..");
1486     }
1487 }
1488

```



```
C:\Users\Shreshtha Aggarwal\Desktop\java>javac Series.java
```

```
C:\Users\Shreshtha Aggarwal\Desktop\java>java Series
```

```
Sum of Even numbers from 1 to 100 is : 2550
```

```
Main thread exiting..
```

```
Sum of Odd numbers from 1 to 100 is : 2500
```

```
Child thread exiting..
```

```
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```
1489 //Generate random number
1490 import java.util.*;
1491 class square implements Runnable{
1492     int i;
1493     Thread t;
1494     square(int n){
1495         t= new Thread(this);
1496         i=n;
1497         t.start();
1498     }
1499     public void run(){
1500         try{
1501             int s= i*i;
1502             System.out.println("Square of " +i+ " : " +s+"\n");
1503             Thread.sleep(1000);
1504         }
1505         catch (InterruptedException e){
1506             System.out.println("Square thread interrupt..");
1507         }
1508     }
1509 }
1510
1511 class cube implements Runnable{
1512     int i;
1513     Thread t1;
1514     cube(int n){
1515         t1= new Thread(this);
1516         i= n;
1517         t1.start();
1518     }
1519     public void run(){
1520         try{
1521             int c= i*i*i;
1522             System.out.println("Cube of " +i+ " : " +c+"\n");
1523             Thread.sleep(1000);
1524         }
1525         catch (InterruptedException e){
1526             System.out.println("Cube thread interrupt..");
1527         }
1528     }
1529 }
```

```

1530 class random implements Runnable
1531 {
1532     Thread t2;
1533     int a;
1534     random(int b){
1535         t2= new Thread(this);
1536         a=b;
1537         t2.start();
1538     }
1539     public void run(){
1540         try{
1541             Random ran= new Random();
1542             for(int i =0;i<a;i++){
1543                 int r = ran.nextInt(101);
1544                 System.out.println("Random Integer generated : " + r);
1545                 if(r%2==0){
1546                     System.out.println("Number:"+r+" i.e. even. So,");
1547                     square t= new square(r);
1548                 }
1549                 else{
1550                     System.out.println("Number:"+r+" i.e. odd. So,");
1551                     cube t1= new cube(r);
1552                 }
1553                 Thread.sleep(1000);
1554             }
1555         }
1556         catch(InterruptedException e){
1557             System.out.println("Random no. thread interrupted");
1558         }
1559     }
1560 }
1561 class Series{
1562     public static void main(String args[]){
1563         int a;
1564         Scanner in= new Scanner(System.in);
1565         System.out.print("Enter number of random numbers you want to generate : ");
1566         a=in.nextInt();
1567         random ra = new random(a);
1568     }
1569 }
1570
1571

```




```
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```

```
C:\Users\Shreshtha Aggarwal\Desktop\java>java Series
```

```
Enter number of random numbers you want to generate : 5
```

```
Random Integer generated : 54
```

```
Number:54 i.e. even. So,
```

```
Square of 54 : 2916
```

```
Random Integer generated : 36
```

```
Number:36 i.e. even. So,
```

```
Square of 36 : 1296
```

```
Random Integer generated : 81
```

```
Number:81 i.e. odd. So,
```

```
Cube of 81 : 531441
```

```
Random Integer generated : 82
```

```
Number:82 i.e. even. So,
```

```
Square of 82 : 6724
```

```
Random Integer generated : 11
```

```
Number:11 i.e. odd. So,
```

```
Cube of 11 : 1331
```

```
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