	week -11
	Extre programs
	0
1.	class New Thread implements kunnable
	8 Thread t;
de la lace	int sum = 0;
	Newthread
	E t- new Tread (this, "NThread")
	1. start();
1000	3
	Public void runc)
	8 for (ind (=1'), (C=100; C+1)
1000	E if (1,51=0)
	Sum= Sumti
	3
	is: "Asum) 33
	us ! " + sum ): 33
	4 45
	dass Threadol
	2 public Static void main (Staing argets)
	7 (111 0411-0)
	New Thread new read Then purthered ();
	for ( int i=1; (=100; (++)
	'E i) (i)-2:=0)
	Sum=sum+1'
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	System out point in ("Sum of even numbers is:"
	2 7 XUWI)

```
class NewThread implements Runnable
{ Thread t;
int sum=0;
 NewThread()
 {
         t=new Thread(this, "NThread");
        t.start();
 }
 public void run()
 {
         for(int i=1;i<=100;i++)
         {
                 if(i%2!=0)
                        sum=sum+i;
         }
         System.out.println("Sum of odd numbers is: "+sum);
 }
}
class Thread2
{
       public static void main(String ss[])
       {
               int sum=0;
               NewThread n1=new NewThread();
                       for(int i=1;i<=100;i++)
                       {
                              if(i%2==0)
                        sum=sum+i;
```

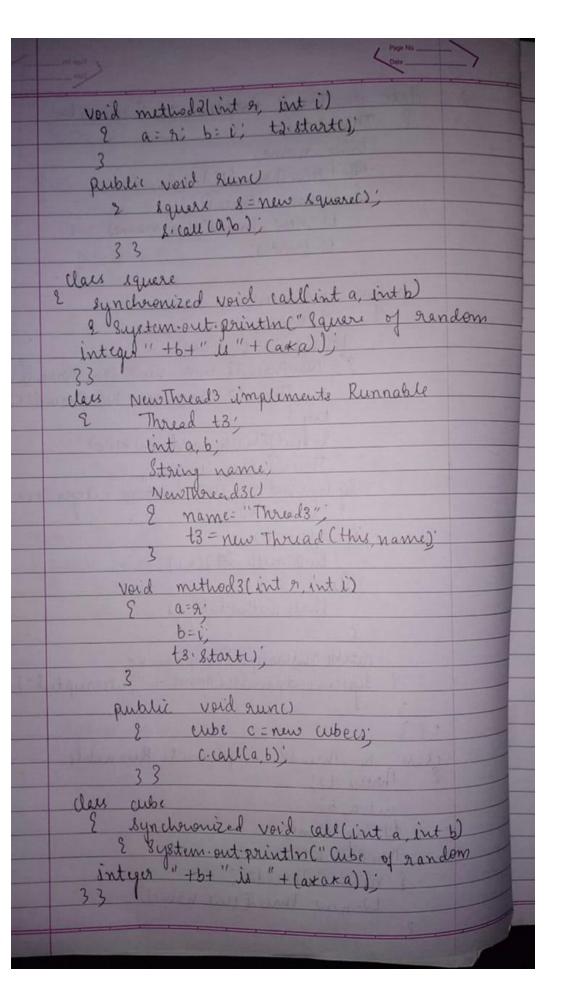
```
System.out.println("Sum of even numbers is: "+sum);
}

C:\Users\Adithi\Desktop\java_prgs>javac week11_extra1.java

C:\Users\Adithi\Desktop\java_prgs>java Thread2
Sum of even numbers is: 2550
Sum of odd numbers is: 2500

C:\Users\Adithi\Desktop\java_prgs>
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des NauThread implements Runnable Thread ti String name; Me New Thread (1) 2 name = "Thread!"; tI = new Thread this, name) thestorta. public void sun() 2 int 2=0: forlint i: 1; i(=5; i+1) NewThread two new NewThread ; NewThread3 three new NewThread3(); 9= (int) (Math nandom () \*100); Thread sleep (1000) System out paint In ("Random integer "+ i+" il (2/2==0) two methodel 2 (9, 1); three method3 (4, i) catch ( Interrupted Exception a) 9 System out printly ( name + "Interrupted"): class New Thread implements Runnable Thread t2; intab; Staing name, New Threadal & name: "Thread?" td-new thread this name)



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	2 New Thread   One - new New Threadily;		Page No.

```
class NewThread1 implements Runnable
{ Thread t1;
String name;
 NewThread1()
 {
        name="Thread1";
  t1=new Thread(this, name);
        t1.start();
 }
 public void run()
 {
         int r=0;
         for(int i=1;i<=5;i++)
         {
                NewThread2 two = new NewThread2();
                NewThread3 three = new NewThread3();
                 try{
                 r=(int)(Math.random()*100);
                 Thread.sleep(1000);
      System.out.println("Random integer "+i+" is: "+r);
                 if(r%2==0)
                        two.method2(r,i);
                 else
                        three.method3(r,i);
                 }
                 catch (InterruptedException e) {
System.out.println(name + "Interrupted");
}
         }
```

```
}
}
class NewThread2 implements Runnable
{
        Thread t2;
  int a,b;
  String name;
        NewThread2()
        {
               name="Thread2";
    t2=new Thread(this, name);
       }
        void method2(int r,int i)
        {
               a=r;
               b=i;
               t2.start();
        }
       public void run()
        {
               square s=new square();
               s.call(a,b);
       }
}
class square
{
        synchronized void call(int a,int b)
        {
               System.out.println("Square of random integer "+b+" is "+(a*a));
```

```
}
}
class NewThread3 implements Runnable
{
        Thread t3;
        int a,b;
        String name;
        NewThread3()
        {
                name="Thread3";
    t3=new Thread(this, name);
       }
        void method3(int r,int i)
        {
                a=r;
                b=i;
                t3.start();
        }
       public void run()
        {
                cube c=new cube();
                c.call(a,b);
       }
}
class cube
{
        synchronized void call(int a,int b)
        {
                System.out.println("Cube of random integer "+b+" is "+(a*a*a));
```

```
}
}
class ThreadMain
{
     public static void main(String ss[])
     {
           NewThread1 one = new NewThread1();
     }
}
C:\Users\Adithi\Desktop\java_prgs>javac week11_extra2.java
C:\Users\Adithi\Desktop\java_prgs>java ThreadMain
Random integer 1 is: 95
Cube of random integer 1 is 857375
Random integer 2 is: 7
Cube of random integer 2 is 343
Random integer 3 is: 25
Cube of random integer 3 is 15625
Random integer 4 is: 20
Square of random integer 4 is 400
Random integer 5 is: 77
Cube of random integer 5 is 456533
C:\Users\Adithi\Desktop\java prgs>java ThreadMain
Random integer 1 is: 72
Square of random integer 1 is 5184
Random integer 2 is: 68
Square of random integer 2 is 4624
Random integer 3 is: 31
Cube of random integer 3 is 29791
Random integer 4 is: 69
Cube of random integer 4 is 328509
Random integer 5 is: 34
Square of random integer 5 is 1156
C:\Users\Adithi\Desktop\java_prgs>
```