

Extra Programs

```
1) import java.util.*;
import java.lang.String;
class NewThread implements Runnable
{
    Thread t;
    NewThread()
    {
        t = new Thread(this, "New Thread");
        System.out.println("CT: " + t);
        t.start();
    }
    public void run()
    {
        int sum = 0, i;
        try
        {
            for (i = 1; i <= 100; i++)
            {
                if (i % 2 == 1)
                {
                    sum = sum + i;
                }
            }
        }
    }
}
```



```
System.out.println("Sum of odd numbers" +  
sum);
```

```
Thread.sleep(1000);
```

```
}  
catch (InterruptedException e)
```

```
{  
    System.out.println("Child Thread  
Interrupted");
```

```
}
```

```
}
```

```
}
```

```
class ThreadMain
```

```
{
```

```
    public static void main(String args[])
```

```
{
```

```
        int sum=0;
```

```
        NewThread n1 = new NewThread();
```

```
        try
```

```
{
```

```
            for(i=1; i<=100; i++)
```

```
{
```

```
                if (i%2 == 0)
```

```
{
```

```
                    sum = sum + i;
```

```
}
```



```
Thread.sleep(2000);  
System.out.println("Sum of even numbers" +  
sum);
```

```
}  
catch (InterruptedException ie)
```

```
{  
    System.out.println("Child Thread Interrupted");  
}
```

```
}
```

```
}
```

```
2) import java.util.*;  
import java.lang.String;  
import java.util.Random;  
class Square implements Runnable
```

```
{  
    Thread t2;  
    int num;  
    Square(int number)  
    {
```

```
        num = number;
```

```
        t2 = new Thread(this, "child thread");
```

```
        t2.start();
```

```
}
```



```

    public void run()
    {
        System.out.println("Square of " + num +
                           " = " + (num * num));
    }
}

```

Class Cube implements Runnable

```

{
    Thread t3;
    int num;
    Cube (int number)
    {
        num = number;
        t3 = new Thread (this, "child thread");
        t3.start();
    }
    public void run()
    {
        System.out.println("Cube of " + num + " = " +
                           (num * num * num));
    }
}

```

class RandomThread implements Runnable


```
{  
    Thread t1;  
    RandomThread()  
    {  
        t1 = new Thread(this, "child thread");  
        t1.start();  
    }  
    public void run()  
    {  
        Random randnum = new Random();  
        for (int i=0; i<10; i++)  
        {  
            int n = randnum.nextInt(100);  
            System.out.println("Random Integer : "+n);  
            if (n%2 == 0)  
            {  
                Square s = new Square(n);  
            }  
            else  
            {  
                Cube c = new Cube(n);  
            }  
        }  
        try  
        {  
            Thread.sleep(1000);  
        }  
        catch
```


Catch(InterruptedException c)

```
{  
    System.out.println("Interrupted")  
}
```

```
}  
}  
}  
  
class MultipleThread
```

```
{  
    public static void main (String args[])  
    {  
        RandomThread r = new RandomThread();  
    }  
}
```