Aim : Create debug and run Java program based on threads by extending thread class

Theory:

Extending Thread class

- The class should extends Java Thread class.
- The class should overried the Run () method.
- The functionallity that is expected by the Threads to be executed is written in the run () method.

void start (): Creates a new thread and makes it runnable

Void run () : The new thread and begins its life inside this method.

Method Name	Functionality
sleep (long)	Suspend execution for the specified amount of time
sleep (long. int)	Suspend execution for the specified amount of time

active Count ():   Return the number of threads active currently

start ():   Create new branch (thread) and invokes the corresponding run () method.

run ():   Actual code of the Thread is written here by us (programmer) in our thread class. The run () method in Thread classes is Just a dummy method and we override it in our class.

Conclusion :   Hence, we Successfully Create, debug and run Java program based on thread by extending thread class.

Program :-

```
class    ChildThread    extends    Threads {
        ChildThread (String  s) {
            SetName (s);
            Start ();
        }

Public    void    run () {
  String    child = getName ();
  System. Out. println (" Thread  Name :" + child );
    try {
        for (int  i =5 ;  i>0 ; i+ --) {
        System. out. println (" Child :  "  + child + " -> "+i);
        Sleep (500);
        }
    } catch ( Exception  e) { }
        System . out. println (" Child  thread  Exiting --- ");
    }
}


class    practical16 {
    public    static  void    main (String  args []) {
    Thread t= Thread. CurrentThread ();
    System. out. println (t);
    ChildThread    one  =  new    ChildThread (" one ");
    ChildThread    two  =  new    ChildThread (" Two ");
```

```java
try {
    for (int i=5 ; i>0 ; i--) {
        System.out.println. out.println (" Thread : " + t.get
        Name () + "  " + i);

        t.sleep (1000);

    }
} catch (Exception e) { }
    System.out.println ("  Main Thread exiting ---");

}

}
```

```
C:\Users\Public\Java>javac practical16.java

C:\Users\Public\Java>java practical16
Thread[main,5,main]
Thread Name :One
Child :One->5
Thread Name :Two
Child :Two->5
Thread : main 5
Child :One->4
Child :Two->4
Thread : main 4
Child :One->3
Child :Two->3
Child :Two->2
Child :One->2
Thread : main 3
Child :One->1
Child :Two->1
```