

Institute of Computer Technology
B. Tech Computer Science and Engineering
Subject: OOP (2CSE303)

PRACTICAL-22

AIM: - Anshul was provided with a task to optimize the system by implementing multithreading. Consider three threads Thread1, Thread2 and Thread3, Thread2 should run followed by Thread1 set the priorities accordingly. Thread 3 should execute only after Thread2 execution is completed. Also display the meta data of threads such as id, name, alive status.

SOLUTION

```
package practicals;
/**
 *
 * @author YashPrajapati
 */

class Multithreading extends Thread{
    public void run(){
        System.out.println("Thread Running \nID is:
"+Thread.currentThread().getId());
        System.out.println("Priority for "+Thread.currentThread().getName()+" is:
"+Thread.currentThread().getPriority());

        for(int i=0; i<3;i++) {
            System.out.println("Thread is currently active.");
        }
    }
}

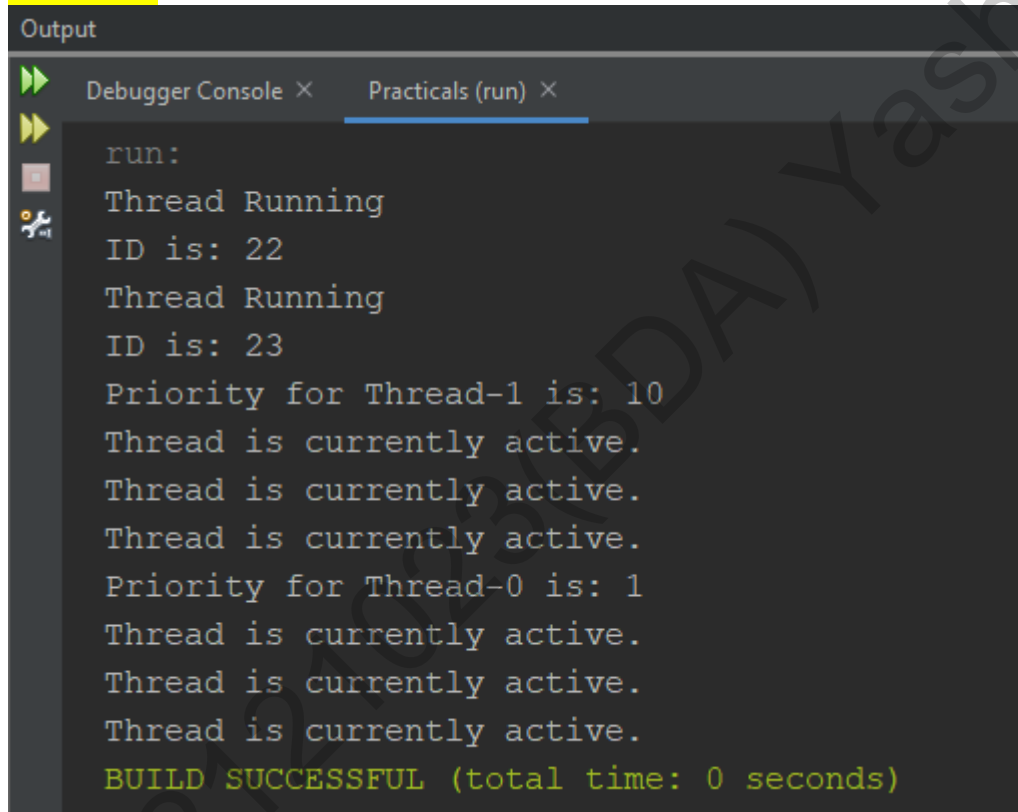
public class prac22 {
    public static void main(String args[]){
        Multithreading t1=new Multithreading();
        Multithreading t2=new Multithreading();
        Multithreading t3=new Multithreading();
        t1.start();
        t2.start();

        t1.setPriority(Thread.MIN_PRIORITY);
```

```
t2.setPriority(Thread.MAX_PRIORITY);

try{
    t2.join();
}
catch(Exception e){
    t3.start();
    System.out.println("Thread Alive: Thread 1: "+t1.isAlive()+" Thread 2:
"+t2.isAlive()+" Thread 3: "+t3.isAlive());
}
}
```

OUTPUT



```
Output
Debugger Console × Practicals (run) ×
run:
Thread Running
ID is: 22
Thread Running
ID is: 23
Priority for Thread-1 is: 10
Thread is currently active.
Thread is currently active.
Thread is currently active.
Priority for Thread-0 is: 1
Thread is currently active.
Thread is currently active.
Thread is currently active.
BUILD SUCCESSFUL (total time: 0 seconds)
```