

OOJ LAB TEST-2

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Sem: 3 Section: C Date: 23/12/20
Batch: C2

4) Create a class as shown

```
class Counter{  
    int count;  
    void inc () {  
        count = count + 1;  
    }  
    int getCount () {  
        return count;  
    }  
}
```

create 3 threads ~~with~~ that will call the inc() method on the same counter object. Start them all, and wait for all threads to terminate. Assign different priority to threads. Justify your output

```
class Counter extends Runnable {  
    int count; the Thread t;  
    Counter (int x, int p)  
    {  
        count = x;  
        t = new Thread (this); t.setPriority(p);  
    }  
    void inc () {  
        count = count + 1;  
    }  
    int getCount () {  
        return count;  
    }  
    public void run () {  
        while (running) {  
            inc();  
            System.out.println (this.getCount());  
        }  
    }  
    public void stop () {  
        running = false;  
    }  
}
```

```
public void start () {
```

```
    t.start();
```

```
}
```

```
}
```

```
class main-class {
```

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

```
{ Thread.currentThread().setPriority(Thread.MAX_PRIORITY);  
Counter c1 = new Counter(5, Thread.NORM_PRIORITY+1);
```

```
    Counter c1 = new Counter (5, Thread.NORM_PRIORITY+1);
```

```
    Counter c2 = new Counter (8, Thread.NORM_PRIORITY+2);
```

```
    Counter c3 = new Counter (7, Thread.NORM_PRIORITY+3);
```

```
Count
```

```
    c1.start();
```

```
    c2.start();
```

```
    c3.start();
```

```
    try { Thread.sleep(1000)
```

```
    }
```

```
    catch (InterruptedException e) {
```

```
        System.out.println("Main thread interrupted");
```

```
    }
```

```
    c1.stop();
```

```
    c2.stop();
```

```
    c3.stop();
```

```
    try {
```

```
try {
```

```
        System.out.println("Low priority thread" + c1.getCount());
```

```
        System.out.println("Medium priority thread" + c2.getCount());
```

```
        System.out.println("High priority thread" + c3.getCount());
```

```
    } try {
```

```
        c1.t.join();
```

```
        c2.t.join();
```

```
        c3.t.join(); }
```

```
catch (InterruptedException e) {
```

```
    System.out.println("Interrupt exception caught"); }
```

```
}
```

```
}
```