

## DC PRAC 6

**CODE:**

[illegible]

```

        System.out.println("process p" + cs + "is already in critical section.");
        q.add(p2);
    }

    System.out.println("System Status:");
    System.out.println("critical section is occupied by:" + cs);
    System.out.println("process waiting is: " + q);
    break;
}
case 3: {
    if (flag == 0) {
        cs = 3;
        flag = 1;
    } else {
        System.out.println("process p" + cs + "is already in critical section.");
        q.add(p3);
    }

    System.out.println("System Status:");
    System.out.println("critical section is occupoied by:" + cs);
    System.out.println("process waiting is: " + q);
    break;
}
break;
}
case 2: {
    System.out.println(" process p" + cs + "is removed from section.");

    if (q.isEmpty()) {
        cs = q.peek();

        q.remove();
        System.out.println("System status:");
        System.out.println("Critical Section occupied by p" + cs);
    } else {
        System.out.println("No Process is waiting in the queue");
        flag = 0;
    }
}
case 3: {

    break;

}
}
}
while (3 != opt0);
}
}

```

## OUTPUT:

```
ax-508@ax508-OptiPlex-3050:~/Desktop$ java Mutex
....menu...
1.Request the critical section
2.Release the critical section
3. Exit
1
Select the process.
1.p1
2.p2
3.p3
1
System Status:
critical section is occupied by:1
process waiting is: []
....menu...
1.Request the critical section
2.Release the critical section
3. Exit
1
Select the process.
1.p1
2.p2
3.p3
3
process p1is already in critical section.
System Status:
critical section is occupied by:1
process waiting is: [3]
....menu...
1.Request the critical section
2.Release the critical section
3. Exit
2
process p1is removed from section.
No Process is waiting in the queue
....menu...
1.Request the critical section
2.Release the critical section
3. Exit
```