```
1  --------------BlockingQueueTask.java---------
2  package com.ameya.tasks;
3
4  public class BlockingQueueTask implements Runnable {
5
6      private String name=null;
7      public BlockingQueueTask(String name) {
8          this.name=name;
9      }
10     public String getName() {
11         return name;
12     }
13     @Override
14     public void run() {
15         try {
16             Thread.sleep(500);
17         }catch(InterruptedException e) {
18             e.printStackTrace();
19         }
20         System.out.println("Thread :: "+name);
21     }
22
23 }
24 --------------CustomThreadPoolExecutor.java-------------------
   -
25 package com.ameya.executors;
26
27 import java.util.concurrent.BlockingQueue;
28 import java.util.concurrent.RejectedExecutionHandler;
29 import java.util.concurrent.ThreadFactory;
30 import java.util.concurrent.ThreadPoolExecutor;
31 import java.util.concurrent.TimeUnit;
32
33 public class CustomThreadPoolExecutor extends ThreadPoolExecutor {
34
35     public CustomThreadPoolExecutor(int corePoolSize, int
       maximumPoolSize, long keepAliveTime, TimeUnit unit,
36             BlockingQueue<Runnable> workQueue) {
37         super(corePoolSize, maximumPoolSize, keepAliveTime, unit,
           workQueue);
38     }
```

```
39
40      @Override
41      protected void beforeExecute(Thread t, Runnable r) {
42          super.beforeExecute(t, r);
43          System.out.println("beforeExecute logic done");
44      }
45
46      @Override
47      protected void afterExecute(Runnable r, Throwable t) {
48          super.afterExecute(r, t);
49          if(t!=null) {
50              System.out.println("Exception Handler Logic Done");
51          }
52          System.out.println("afterExecute logic done");
53      }
54
55  }
56  ------------------TestBlockingQueue.java---------
57  package com.ameya.test;
58
59  import java.util.concurrent.ArrayBlockingQueue;
60  import java.util.concurrent.BlockingQueue;
61  import java.util.concurrent.RejectedExecutionHandler;
62  import java.util.concurrent.ThreadPoolExecutor;
63  import java.util.concurrent.TimeUnit;
64
65  import com.ameya.executors.CustomThreadPoolExecutor;
66  import com.ameya.tasks.BlockingQueueTask;
67
68  public class TestBlockingQueue {
69
70      public static void main(String[] args) {
71          Integer threadCnt=0;
72          BlockingQueue<Runnable> worksQueue=new
            ArrayBlockingQueue<Runnable>(50);
73          CustomThreadPoolExecutor executor=new
            CustomThreadPoolExecutor(10, 20, 5000,
            TimeUnit.MILLISECONDS, worksQueue);
74          executor.setRejectedExecutionHandler(
75                  new RejectedExecutionHandler() {
76
```

```
77                      @Override
78                      public void rejectedExecution(Runnable r,
                        ThreadPoolExecutor executor) {
79                          System.out.println("TASK REJECTED :
                            "+((BlockingQueueTask) r).getName());
80                          System.out.println("WAITING FOR SECOND..");
81                          try {
82                              Thread.sleep(1000);
83                          } catch (InterruptedException e) {
84                              e.printStackTrace();
85                          }
86                          System.out.println("ANOTHER TIME :
                            "+((BlockingQueueTask) r).getName());
87                          executor.execute(r);
88                      }});
89          executor.prestartAllCoreThreads();
90
91          while(true) {
92              threadCnt++;
93              System.out.println("Adding TAsk : "+threadCnt);
94              executor.execute(new BlockingQueueTask(threadCnt+""));
95              if(threadCnt==100)
96                  break;
97          }
98
99      }
100
101 }
102
```