import java.util.concurrent.Executor;

import java.util.concurrent.ExecutorService;

import java.util.concurrent.Executors;

class Task implements Runnable {

String taskname;

public Task(String name)

{

taskname = name;

}

public void run()

{

System.out.println("The task name is " +taskname +" executed by " +Thread.currentThread().getName());

}

}

class TaskExecutor {

public static void main(String a[])

{

Task task1 = new Task("Task1");

Task task2 = new Task("Task2");

Task task3 = new Task("Task3");

ExecutorService threadexecutor = Executors.newCachedThreadPool();

System.out.println("Executor started");

threadexecutor.execute(task1);

threadexecutor.execute(task2);

threadexecutor.execute(task3);

threadexecutor.shutdown();

if(threadexecutor.isShutdown())

{

System.out.println("All tasks completed. The executor is shutting down.");

}

}

}