

多线程随笔

```
1. public class CallableTest {
    public static void main(String[] args) {

        String[] words = { "first", "second", "world", "thread" };
        //
        ExecutorService pool = Executors.newCachedThreadPool();
        Set<Future<Integer>> set = new HashSet<Future<Integer>>();

        for (String word : words) {
            Callable callable = new testCallable(word);
            Future future = pool.submit(callable);
            try {
                System.out.println(future.isDone()+Thread.currentThread().getName());
                System.out.println(future.get().toString()+"aaa");
                System.out.println(future.isDone()+Thread.currentThread().getName());
            } catch (InterruptedException e) {
                // TODO Auto-generated catch block
                e.printStackTrace();
            } catch (ExecutionException e) {
                // TODO Auto-generated catch block
                e.printStackTrace();
            }
            set.add(future);
        }

        int sum = 0;
        for (Future future : set) {
            try {
                sum += (int) future.get();
            } catch (InterruptedException e) {
                e.printStackTrace();
            } catch (ExecutionException e) {
                e.printStackTrace();
            }
        }

        System.out.println("数组中所有单词的总长度为: " + sum);
    }
}

class testCallable implements Callable {
    private String word;

    public testCallable(String word) {

        this.word = word;
    }
}
```

```

}

@Override
public Integer call() throws Exception {
    System.out.println(Thread.currentThread().getName() + ": 开始执行");
    try {
        Thread.currentThread().sleep(2000);
    } catch (InterruptedException e) {
        e.printStackTrace();
    }
    System.out.println(Thread.currentThread().getName() + ": 正在处理");
    System.out.println(Thread.currentThread().getName() + ": " + word + "长度为: " + word.length());
    return Integer.valueOf(word.length());
}
}

```

处理结果:

```

pool-1-thread-1: 开始执行
pool-1-thread-1: 正在处理
pool-1-thread-1: first长度为: 5
truemain
5aaa
truemain
falsemain
pool-1-thread-2: 开始执行
pool-1-thread-2: 正在处理
pool-1-thread-2: second长度为: 6
6aaa
truemain
falsemain
pool-1-thread-2: 开始执行
pool-1-thread-2: 正在处理
pool-1-thread-2: world长度为: 5
5aaa
truemain
falsemain
pool-1-thread-2: 开始执行
pool-1-thread-2: 正在处理
pool-1-thread-2: thread长度为: 6
6aaa
truemain
数组中所有单词的总长度为: 22

```