

First Steps and Java Threads

1. Simple Thread Programs

Please write a simple program that creates and starts two or more threads. Each thread produces terminal output. Please let your program run and observe its output behavior. How does the output interleave?

2. Synchronization

Please have a look at the un-synchronized `Counter` example:

```
class Counter {  
    private int c = 0;  
  
    public void increment() {  
        int b=c;  
        b=b+1;  
        c=b;  
    }  
  
    public void decrement() {  
        int d=c;  
        d=d-1;  
        c=d;  
    }  
  
    public int value() {  
        return c;  
    }  
}
```

Please define threads, which use the `Counter` class and detect thread interferences. Please provoke an interference error.

Please use a synchronized version of `Counter` and try to reproduce the error.

Please be prepared for face-to-face technical discussions. These will happen during the on-site tutorial sessions.