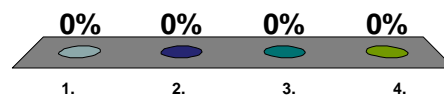


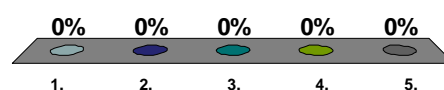
What diagrams do we use to help us determine the number of threads per component?

1. Timing Diagram
2. UCM (Use Case Map)
3. UML Class Diagram
4. UML Collaboration diagram



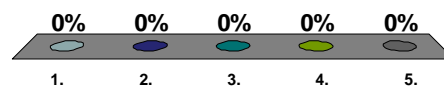
What is a good example of an Immutable class?

1. Box
2. Thread.stop()
3. ArrayList
4. Integer
5. A synchronized collection



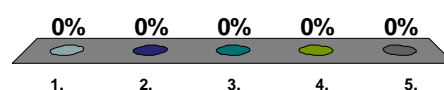
What is a good example of a Thread-Safe class?

1. Box
2. Thread.stop()
3. ArrayList
4. Integer
5. A synchronized collection



What is a good example of a Thread Compatible class?

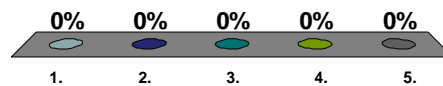
1. Box
2. Thread.stop()
3. ArrayList
4. Integer
5. A synchronized collection



What is wrong with this code segment?

```
synchronized(a) {
    while(...) {
        try { wait(); } catch(InterruptedException e) {return;}
    }
    a.someMethod(...);
    ...
}
```

1. "a" should be box or buffer
2. someMethod must be synchronized
3. We should notifyAll() not wait()
4. It should be a.wait() not wait()
5. "a" must be a Thread



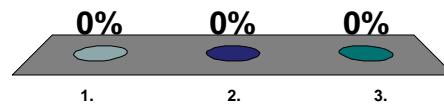
How many ways can we represent an active class in UML?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8



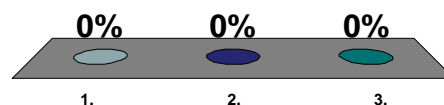
What synchronization property corresponds to methods with sufficient internal synchronization?

1. concurrent
2. sequential
3. guarded



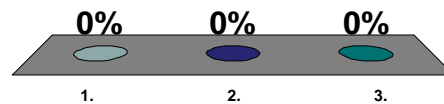
What synchronization property corresponds to methods that require external synchronization?

1. concurrent
2. sequential
3. guarded



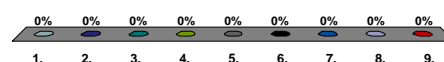
What synchronization property corresponds to methods that require no internal or external synchronization?

1. concurrent
2. sequential
3. guarded



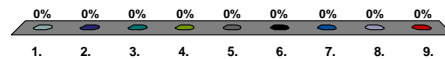
What class thread safety level(s) have methods that require no internal or external synchronization?

1. thread hostile
2. thread-safe
3. thread compatible
4. immutable
5. conditionally thread-safe
6. 1 and 4
7. 2 and 3
8. 2 and 5
9. 3 and 5



What class thread safety level(s) have methods that require external synchronization?

1. thread hostile
2. thread-safe
3. thread compatible
4. immutable
5. conditionally thread-safe
6. 1 and 4
7. 2 and 3
8. 2 and 5
9. 3 and 5



What class thread safety level(s) contain methods that have sufficient internal synchronization?

1. thread hostile
2. thread-safe
3. thread compatible
4. immutable
5. conditionally thread-safe
6. 1 and 4
7. 2 and 3
8. 2 and 5
9. 3 and 5

