Worksheet #21a:
Abstract Metrics with Isolated Constructs

Name: ___________________ Netid: ___________________

Compute the WORK and CPL metrics for this program with a global isolated construct. Indicate if your answer depends on the execution order of isolated constructs. Since there may be multiple possible computation graphs (based on serialization edges), try and pick the worst-case CPL value across all computation graphs.

```java
finish(() -> {
    for (int i = 0; i < 5; i++) {
        async(() -> {
            doWork(2);
            isolated(() -> { doWork(1); });
            doWork(2);
            }); // async
        } // for
    }); // finish
```

Worksheet #21b:
Abstract Metrics with Object-based Isolated Constructs

Compute the WORK and CPL metrics for this program with an object-based isolated construct. Indicate if your answer depends on the execution order of isolated constructs. Since there may be multiple possible computation graphs (based on serialization edges), try and pick the worst-case CPL value across all computation graphs.

```java
finish(() -> {
    // Assume X is an array of distinct objects
    for (int i = 0; i < 5; i++) {
        async(() -> {
            doWork(2);
            isolated(X[i], X[i+1],
            () -> { doWork(1); });
            doWork(2);
            }); // async
        } // for
    }); // finish
```