Worksheet 18: Cooperative vs Blocking Runtime schedulers

Name: _____   Net ID: _____

Assume that creating an async causes the task to be pushed into the work queue for execution by any available worker thread.

Fill in the following table for the program shown on the right by adding the appropriate number of threads required to execute the program. For the minimum or maximum numbers, your answer must represent a schedule where at some point during the execution all threads are busy executing a task or blocked on some synchronization constraint.

```
10. finish {
11.     async { S1; }
12.     finish {
13.         async {
14.             finish {
15.                 async { S2; }
16.                 S3;
17.             }
18.             S4;
19.         }
20.         async {
21.             async { S5; }
22.             S6;
23.         }
24.         S7;
25.     }
26.     S8;
27. }
```

	Minimum number of threads	Maximum number of threads
Cooperative Runtime		
Blocking Runtime		

Computation graph for async-finish program in Worksheet 18