

## Operating Systems(CSL3030)

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### Dining Philosophers Problem

#### Screenshots:

#### Test\_Case\_1-

```
Philosopher 2 is thinking.  
Philosopher 5 is thinking.  
Philosopher 3 has finished eating.  
Philosopher 4 is eating.  
Philosopher 1 has finished eating.  
Philosopher 2 is eating.  
Philosopher 3 is thinking.  
Philosopher 1 is thinking.  
Philosopher 4 has finished eating.  
Philosopher 5 is eating.  
Philosopher 2 has finished eating.  
Philosopher 3 is eating.  
Philosopher 4 is thinking.  
Philosopher 2 is thinking.  
Philosopher 5 has finished eating.  
Philosopher 1 is eating.  
Philosopher 3 has finished eating.  
Philosopher 4 is eating.  
Philosopher 5 is thinking.  
Philosopher 3 is thinking.  
Philosopher 1 has finished eating.  
Philosopher 2 is eating.  
Philosopher 4 has finished eating.  
Philosopher 5 is eating.  
Philosopher 1 is thinking.  
Philosopher 4 is thinking.  
Philosopher 2 has finished eating.  
Philosopher 5 has finished eating.  
Philosopher 3 is eating.  
Philosopher 1 is eating.
```

#### Test\_Case\_2-

```
***** Running Test Case 2 *****  
Philosopher 2 is thinking.  
Philosopher 1 is thinking.  
Philosopher 5 is thinking.  
Philosopher 3 is thinking.  
Philosopher 4 is thinking.  
Philosopher 2 is eating.  
Philosopher 5 is eating.  
Philosopher 5 has finished eating.  
Philosopher 2 has finished eating.  
Philosopher 3 is eating.  
Philosopher 1 is eating.  
Philosopher 2 is thinking.  
Philosopher 5 is thinking.  
Philosopher 3 has finished eating.  
Philosopher 4 is eating.  
Philosopher 1 has finished eating.  
Philosopher 2 is eating.  
Philosopher 4 has finished eating.  
Philosopher 5 is eating.  
Philosopher 2 has finished eating.  
Philosopher 5 has finished eating.  
Philosopher 1 ate 1 times.  
Philosopher 2 ate 2 times.  
Philosopher 3 ate 1 times.  
Philosopher 4 ate 1 times.  
Philosopher 5 ate 2 times.  
All philosophers have eaten at least once within the timeout.
```

## Test\_Case\_3-

```
Philosopher 4 has finished eating.  
Philosopher 2 is eating.  
Philosopher 4 is thinking.  
Philosopher 2 has finished eating.  
Philosopher 5 is eating.  
Philosopher 2 is thinking.  
Philosopher 5 has finished eating.  
Philosopher 1 is eating.  
Philosopher 5 is thinking.  
Philosopher 1 has finished eating.  
Philosopher 3 is eating.  
Philosopher 1 is thinking.  
Philosopher 3 has finished eating.  
Philosopher 4 is eating.  
Philosopher 3 is thinking.  
Philosopher 4 has finished eating.  
Philosopher 2 is eating.  
Philosopher 2 has finished eating.  
Philosopher 1 is eating.  
Philosopher 1 has finished eating.  
Philosopher 3 is eating.  
Philosopher 3 has finished eating.  
Philosopher 5 is eating.  
Philosopher 5 has finished eating.  
Philosopher 1 ate 4 times.  
Philosopher 2 ate 3 times.  
Philosopher 3 ate 4 times.  
Philosopher 4 ate 3 times.  
Philosopher 5 ate 4 times.  
Test Case 3 Passed: All philosophers ate a roughly equal number of times.
```

## Test\_Case\_4-

```
Philosopher 4 is eating.  
Philosopher 3 is thinking.  
Philosopher 5 is thinking.  
Philosopher 2 has finished eating.  
Philosopher 1 is eating.  
Philosopher 4 has finished eating.  
Philosopher 3 is eating.  
Philosopher 2 is thinking.  
Philosopher 4 is thinking.  
Philosopher 1 has finished eating.  
Philosopher 5 is eating.  
Philosopher 3 has finished eating.  
Philosopher 2 is eating.  
Philosopher 1 is thinking.  
Philosopher 3 is thinking.  
Philosopher 5 has finished eating.  
Philosopher 4 is eating.  
Philosopher 2 has finished eating.  
Philosopher 1 is eating.  
Philosopher 5 is thinking.  
Philosopher 2 is thinking.  
Philosopher 4 has finished eating.  
Philosopher 3 is eating.  
Philosopher 1 has finished eating.  
Philosopher 5 is eating.  
Philosopher 4 is thinking.  
Philosopher 1 is thinking.  
Philosopher 3 has finished eating.  
Philosopher 2 is eating.  
Philosopher 4 is eating.  
Philosopher 5 has finished eating.
```

## Test\_Case\_5-

```
Philosopher 1 is eating.  
Philosopher 4 has finished eating.  
Philosopher 3 is eating.  
Philosopher 2 is thinking.  
Philosopher 4 is thinking.  
Philosopher 1 has finished eating.  
Philosopher 5 is eating.  
Philosopher 3 has finished eating.  
Philosopher 2 is eating.  
Philosopher 1 is thinking.  
Philosopher 3 is thinking.  
Philosopher 5 has finished eating.  
Philosopher 4 is eating.  
Philosopher 2 has finished eating.  
Philosopher 1 is eating.  
Philosopher 5 is thinking.  
Philosopher 2 is thinking.  
Philosopher 4 has finished eating.  
Philosopher 3 is eating.  
Philosopher 1 has finished eating.  
Philosopher 5 is eating.  
Philosopher 3 has finished eating.  
Philosopher 2 is eating.  
Philosopher 5 has finished eating.  
Philosopher 2 has finished eating.  
Philosopher 1 ate 6 times and waited 5.98 seconds.  
Philosopher 2 ate 7 times and waited 5.95 seconds.  
Philosopher 3 ate 6 times and waited 7.97 seconds.  
Philosopher 4 ate 6 times and waited 5.95 seconds.  
Philosopher 5 ate 6 times and waited 8.00 seconds.
```