ASSIGNMENT 5- OPERATING SYSTEM

Name: Yogita Mundankar

Roll no. B22CS068

TEST CASE 1:

```
yogita@yogita-Inspiron-5502:-$ nano A5.c
yogita@yogita-Inspiron-5502:-$ gcc A5.c -o A5
yogita@yogita-Inspiron-5502:-$ cfc A5.c
yogita@yogita-Inspiron-5502:-$
yogita@yogita-Insp
```

TEST CASE 2:

```
yogita@yogita-Inspiron-5502:~$ nano A5 Test2.c
yogita@yogita-Inspiron-5502:~$ gcc A5_Test2.c -o A5_Test2
yogita@yogita-Inspiron-5502:~$ ./A5 Test2
Philosopher 1 is thinking.
Philosopher 3 is thinking.
Philosopher 2 is thinking.
Philosopher 4 is thinking.
Philosopher 5 is thinking.
Current Status:
Philosopher 1 is eating.
Philosopher 2 is waiting.
Philosopher 3 is waiting.
Philosopher 4 is waiting.
Philosopher 5 is waiting.
Current Status:
Philosopher 1 is eating.
Philosopher 2 is waiting.
Philosopher 3 is eating.
Philosopher 4 is waiting.
Philosopher 5 is waiting.
Philosopher 3 has finished eating.
Philosopher 1 has finished eating.
Current Status:
Philosopher 1 is waiting.
Philosopher 2 is waiting.
Philosopher 3 is waiting.
Philosopher 4 is waiting.
Philosopher 5 is eating.
Current Status:
Philosopher 1 is waiting.
Philosopher 2 is eating.
Philosopher 3 is waiting.
Philosopher 4 is waiting.
Philosopher 5 is eating.
Philosopher 3 is thinking.
Philosopher 1 is thinking.
Philosopher 5 has finished eating.
Philosopher 2 has finished eating.
```

TEST CASE 3:

```
yogita@yogita-Inspiron-5502:~$ nano A5_Test3.c
yogita@yogita-Inspiron-5502:~$ gcc A5_Test3.c -o A5_Test3
yogita@yogita-Inspiron-5502:~$ ./A5_Test3
Philosopher 1 is thinking.
Philosopher 2 is thinking.
Philosopher 3 is thinking.
Philosopher 5 is thinking.
Philosopher 4 is thinking.
Philosopher 1 is eating. (Eat count: 1)
Philosopher 4 is eating. (Eat count: 1)
Philosopher 1 has finished eating.
Philosopher 1 is thinking.
Philosopher 4 has finished eating.
Philosopher 4 is thinking.
Philosopher 2 is eating. (Eat count: 1)
Philosopher 5 is eating. (Eat count: 1)
Philosopher 2 has finished eating.
Philosopher 2 is thinking.
Philosopher 3 is eating. (Eat count: 1)
Philosopher 5 has finished eating.
Philosopher 5 is thinking.
Philosopher 1 is eating. (Eat count: 2)
Philosopher 3 has finished eating.
Philosopher 3 is thinking.
Philosopher 1 has finished eating.
Philosopher 1 is thinking.
Philosopher 4 is eating. (Eat count: 2)
Philosopher 2 is eating. (Eat count: 2)
Philosopher 4 has finished eating.
Philosopher 4 is thinking.
Philosopher 2 has finished eating.
Philosopher 2 is thinking.
Philosopher 1 is eating. (Eat count: 3)
Philosopher 3 is eating. (Eat count: 2)
Philosopher 1 has finished eating.
Philosopher 1 is thinking.
Philosopher 5 is eating. (Eat count: 2)
Philosopher 3 has finished eating.
Philosopher 3 is thinking.
Philosopher 2 is eating. (Eat count: 3)
Philosopher 5 has finished eating.
Philosopher 5 is thinking.
Philosopher 4 is eating. (Eat count: 3)
Philosopher 2 has finished eating.
Philosopher 2 is thinking.
Philosopher 1 is eating. (Eat count: 4)
Philosopher 4 has finished eating.
Philosopher 4 is thinking.
Philosopher 1 has finished eating.
Philosopher 1 is thinking.
Philosopher 3 is eating. (Eat count: 3)
Philosopher 5 is eating. (Eat count: 3)
Philosopher 3 has finished eating.
Philosopher 3 is thinking.
Philosopher 5 has finished eating.
```

TESTCASE 4:

```
yogita@yogita-Inspiron-5502:~$ nano A5 Test4.c
yogita@yogita-Inspiron-5502:~$ gcc A5 Test4.c -o A5 Test4
yogita@yogita-Inspiron-5502:~$ ./A5 Test4
Philosopher 1 is thinking.
Philosopher 2 is thinking.
Philosopher 4 is thinking.
Philosopher 5 is thinking.
Philosopher 3 is thinking.
Philosopher 1 is eating.
Philosopher 4 is eating.
Philosopher 1 is finished eating.
Philosopher 1 is thinking.
Philosopher 4 is finished eating.
Philosopher 4 is thinking.
Philosopher 2 is eating.
Philosopher 5 is eating.
Philosopher 5 is finished eating.
Philosopher 5 is thinking.
Philosopher 2 is finished eating.
Philosopher 2 is thinking.
Philosopher 1 is eating.
Philosopher 4 is eating.
Philosopher 1 is finished eating.
Philosopher 1 is thinking.
Philosopher 4 is finished eating.
Philosopher 4 is thinking.
Philosopher 5 is eating.
Philosopher 3 is eating.
Philosopher 5 is finished eating.
Philosopher 5 is thinking.
Philosopher 3 is finished eating.
Philosopher 3 is thinking.
Philosopher 2 is eating.
Philosopher 4 is eating.
Philosopher 2 is finished eating.
Philosopher 2 is thinking.
Philosopher 4 is finished eating.
Philosopher 1 is eating.
Philosopher 3 is eating.
Philosopher 3 is finished eating.
Philosopher 3 is thinking.
Philosopher 1 is finished eating.
Philosopher 2 is eating.
Philosopher 5 is eating.
Philosopher 2 is finished eating.
Philosopher 5 is finished eating.
Philosopher 3 is eating.
Philosopher 3 is finished eating.
All philosophers have completed their meals. Program terminating.
yogita@yogita-Inspiron-5502:~$
```

TESTCASE 5.

```
yogita@yogita-Inspiron-5502:~$ nano A5_Test5.c
yogita@yogita-Inspiron-5502:~$ gcc A5_Test5.c -o A5_Test5
yogita@yogita-Inspiron-5502:~$ ./A5_Test5
Philosopher 1 is thinking.
Philosopher 4 is thinking.
Philosopher 2 is thinking.
Philosopher 3 is thinking.
Philosopher 5 is thinking.
Philosopher 1 is eating.
Philosopher 4 is eating.
Philosopher 1 is finished eating.
Philosopher 1 is thinking.
Philosopher 4 is finished eating.
Philosopher 4 is thinking.
Philosopher 5 is eating.
Philosopher 2 is eating.
Philosopher 2 is finished eating.
Philosopher 2 is thinking.
Philosopher 1 is eating.
Philosopher 5 is finished eating.
Philosopher 5 is thinking.
Philosopher 4 is eating.
Philosopher 1 is finished eating.
Philosopher 1 is thinking.
Philosopher 5 is eating.
Philosopher 4 is finished eating.
Philosopher 4 is thinking.
Philosopher 3 is eating.
Philosopher 5 is finished eating.
Philosopher 5 is thinking.
Philosopher 3 is finished eating.
Philosopher 3 is thinking.
Philosopher 4 is eating.
Philosopher 1 is eating.
Philosopher 4 is finished eating.
Philosopher 4 is thinking.
Philosopher 1 is finished eating.
Philosopher 1 is thinking.
Philosopher 5 is eating.
Philosopher 2 is eating.
Philosopher 5 is finished eating.
Philosopher 5 is thinking.
Philosopher 1 is eating.
Philosopher 2 is finished eating.
Philosopher 2 is thinking.
Philosopher 3 is eating.
Philosopher 1 is finished eating.
Philosopher 1 is thinking.
Philosopher 3 is finished eating.
Philosopher 3 is thinking.
Philosopher 2 is eating.
Philosopher 4 is eating.
Philosopher 2 is finished eating.
Philosopher 2 is thinking.
```