

### Program Compilation

```
lah119@gpu12:oldworkingproducerconsumer$ make
g++ -Wall -c helper.cc main.cc
g++ -Wall -pthread -o main helper.o main.o
```

### Program Execution & Output

```
lah119@gpu12:pc$ ./main 5 6 2 3
In Main: Creating Producer Thread Number 1
In Main: Creating Producer Thread Number 2
In Main: Creating Consumer Thread Number 1
In Main: Creating Consumer Thread Number 2
In Main: Creating Consumer Thread Number 3
Producer(2): Job id 1 duration 8
Producer(2): Job id 2 duration 4
Producer(1): Job id 3 duration 7
Producer(2): Job id 4 duration 10
Producer(2): Job id 5 duration 3
Consumer(1): Job id 1 executing sleep duration 8
Consumer(1): Job id 2 executing sleep duration 4
Consumer(1): Job id 3 executing sleep duration 7
Consumer(1): Job id 4 executing sleep duration 10
Consumer(1): Job id 5 executing sleep duration 3
Consumer(2): No more jobs left.
Consumer(3): No more jobs left.
Producer(1): Job id 1 duration 1
Producer(2): Job id 2 duration 10
Producer(1): Job id 3 duration 1
Producer(2): Job id 4 duration 3
Producer(2): No more jobs to generate.
Producer(1): Job id 5 duration 7
Consumer(1): Job id 1 executing sleep duration 1
Consumer(1): Job id 2 executing sleep duration 10
Consumer(1): Job id 3 executing sleep duration 1
Consumer(1): Job id 4 executing sleep duration 3
Consumer(1): Job id 5 executing sleep duration 7
Producer(1): Job id 1 duration 9
Producer(1): Job id 2 duration 10
Producer(1): No more jobs to generate.
Consumer(1): Job id 1 executing sleep duration 9
Consumer(1): Job id 2 executing sleep duration 10
Consumer(1): No more jobs left.
```