

## TASK 01

```
riddha@riddha-msi:~$ ./task01
0 produced a by Thread 0
0 consumed a by Thread 1
1 produced b by Thread 0
1 consumed b by Thread 1
2 produced c by Thread 0
2 consumed c by Thread 1
3 produced d by Thread 0
3 consumed d by Thread 1
4 produced e by Thread 0
4 consumed e by Thread 1
5 produced f by Thread 0
5 consumed f by Thread 1
6 produced a by Thread 0
6 consumed a by Thread 1
7 produced b by Thread 0
7 consumed b by Thread 1
8 produced c by Thread 0
8 consumed c by Thread 1
9 produced d by Thread 0
9 consumed d by Thread 1
riddha@riddha-msi:~$
```

## Task 02

```
riddha@riddha-msi:~$ gcc -o task_2 task_2.c
riddha@riddha-msi:~$ ./task_2
Farmer 1: Insert crops R at 0
Current Warehouse State: R N N N N
Farmer 3: Insert crops W at 1
Current Warehouse State: R W N N N
Farmer 2: Insert crops P at 2
Current Warehouse State: R W P N N
Farmer 5: Insert crops S at 3
Current Warehouse State: R W P S N
Farmer 4: Insert crops M at 4
Current Warehouse State: R W P S M
Shop owner 1: Remove crops R from 0
Current Warehouse State: N W P S M
Shop owner 2: Remove crops W from 1
Current Warehouse State: N N P S M
Farmer 3: Insert crops R at 0
Current Warehouse State: R N P S M
Shop owner 3: Remove crops P from 2
Current Warehouse State: R N N S M
Shop owner 2: Remove crops S from 3
Current Warehouse State: R N N N M
Shop owner 4: Remove crops M from 4
Current Warehouse State: R N N N N
Farmer 3: Insert crops W at 1
Current Warehouse State: R W N N N
Shop owner 5: Remove crops R from 0
Current Warehouse State: N W N N N
Shop owner 4: Remove crops W from 1
Current Warehouse State: N N N N N
Farmer 1: Insert crops P at 2
Current Warehouse State: N N P N N
Farmer 5: Insert crops S at 3
Current Warehouse State: N N P S N
Farmer 5: Insert crops M at 4
Current Warehouse State: N N P S M
Farmer 2: Insert crops R at 0
Current Warehouse State: R N P S M
Shop owner 5: Remove crops P from 2
Current Warehouse State: R N N S M
Farmer 4: Insert crops W at 1
Current Warehouse State: R W N S M
Shop owner 2: Remove crops S from 3
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Current Warehouse State: R W N N M  
Shop owner 5: Remove crops M from 4  
Current Warehouse State: R W N N N  
Farmer 4: Insert crops P at 2  
Current Warehouse State: R W P N N  
Farmer 5: Insert crops S at 3  
Current Warehouse State: R W P S N  
Shop owner 4: Remove crops R from 0  
Current Warehouse State: N W P S N  
Farmer 2: Insert crops M at 4  
Current Warehouse State: N W P S M  
Shop owner 4: Remove crops W from 1  
Current Warehouse State: N N P S M  
Shop owner 3: Remove crops P from 2  
Current Warehouse State: N N N S M  
Farmer 2: Insert crops R at 0  
Current Warehouse State: R N N S M  
Shop owner 4: Remove crops S from 3  
Current Warehouse State: R N N N M  
Shop owner 5: Remove crops M from 4  
Current Warehouse State: R N N N N  
Farmer 3: Insert crops W at 1  
Current Warehouse State: R W N N N  
Shop owner 1: Remove crops R from 0  
Current Warehouse State: N W N N N  
Farmer 3: Insert crops P at 2  
Current Warehouse State: N W P N N  
Shop owner 1: Remove crops W from 1  
Current Warehouse State: N N P N N  
Farmer 1: Insert crops S at 3  
Current Warehouse State: N N P S N  
Shop owner 2: Remove crops P from 2  
Current Warehouse State: N N N S N  
Farmer 5: Insert crops M at 4  
Current Warehouse State: N N N S M  
Farmer 4: Insert crops R at 0  
Current Warehouse State: R N N S M  
Shop owner 3: Remove crops S from 3  
Current Warehouse State: R N N N M  
Farmer 2: Insert crops W at 1

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Current Warehouse State: R W N N M
Shop owner 3: Remove crops M from 4
Current Warehouse State: R W N N N
Shop owner 5: Remove crops R from 0
Current Warehouse State: N W N N N
Shop owner 1: Remove crops W from 1
Current Warehouse State: N N N N N
Farmer 1: Insert crops P at 2
Current Warehouse State: N N P N N
Farmer 1: Insert crops S at 3
Current Warehouse State: N N P S N
Shop owner 2: Remove crops P from 2
Current Warehouse State: N N N S N
Farmer 4: Insert crops M at 4
Current Warehouse State: N N N S M
Shop owner 3: Remove crops S from 3
Current Warehouse State: N N N N M
Shop owner 1: Remove crops M from 4
Current Warehouse State: N N N N N
riddha@riddha-msi:~$
```