

# Semaphore Solution (combined)

```
process bee [i=1 to N] {  
  while (true) {  
    collect_honey();  
    P(mutex);  
    fill_pot();  
    portions++;  
    if (portions == H)  
      V(pot_full); # let the bear eat honey, pass mutex baton  
    else  
      V(mutex);  
  }  
}
```

```
sem mutex = 1, # mutual exclusion  
    pot_full = 0; # synchr bear/bees  
int portions; # portions in the pot
```

```
process bear {  
  while (true) {  
    P(pot_full); # wait until the pot is full -- sleep  
    eat_all_honey(); # -- eat  
    portions=0;  
    V(mutex); # let bees start filling the pot again  
  }  
}
```