

prog1.pml ×

prog1.pml

```
1 active proctype Hello() {
2   printf("Hello process, my pid is: %d\n", _pid);
3 }
4
5 init {
6   int lastpid;
7   printf("init process, my pid is: %d\n", _pid);
8   lastpid = run Hello();
9   printf("last pid was: %d\n", lastpid);
10 }
```

TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE

1: powershell

```
PS D:\Spin-master> .\spin prog1.pml
Hello process, my pid is: 0
    init process, my pid is: 1
    last pid was: 2
        Hello process, my pid is: 2
3 processes created
PS D:\Spin-master> |
```

prog1.pml prog2.pml ×

prog2.pml

```
1 proctype gcd(int a;int b) {  
2     if  
3     :: (b == 0) → printf("ans is %d\n", a)  
4     :: (b != 0) → run gcd(b, a % b)  
5     fi  
6 }  
7  
8 init {  
9     run gcd(5, 10);  
10 }
```

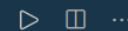
TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE

1: powershell

```
PS D:\Spin-master> .\spin prog2.pml  
ans is 5  
4 processes created  
PS D:\Spin-master> 
```



prog1.pml prog2.pml prog3.pml ×



prog3.pml

```
1 int res = 1;
2
3 proctype fac(int n) {
4     if
5     :: (n == 1) → printf("ans is %d\n", res)
6     :: (n ≥ 2 ) → res = res * n; run fac(n-1)
7     fi
8 }
9
10 init {
11     run fac(5);
12 }
```

TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE

1: powershell



```
PS D:\Spin-master> .\spin prog3.pml
ans is 120
```

```
6 processes created
```

```
PS D:\Spin-master> 
```



prog1.pml prog2.pml prog3.pml prog4.pml ×

prog4.pml

```
1 #define SIZE 5
2 chan c = [6] of {byte};
3 chan d = [true] of {bool};
4 byte fullness = 0;
5 active proctype producer() {
6     byte data;
7     do
8         :: fullness < SIZE → fullness = fullness + 1;
9         | | | | | c ! data;
10        | | | | | data++;
11        | | | | | printf("item produced\n")
12        :: d ? true;
13    od
14 }
15 active proctype consumer() {
16     byte data;
17     do
18         :: c?data; fullness = fullness - 1; d ≠ true; printf("item consumed\n")
19     od
20 }
21 active proctype monitor() {
22     assert (fullness ≤ SIZE);
23 }
```

TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE

1: powershell

```
item consumed
item produced
item consumed
item consumed
item produced
item produced
item consumed
```

PS D:\Spin-master>