

Here is an example of the output for the GamingParlor problem.

There are 8 groups, named A through H. Each group does the following:

```
for i = 1 to 5
  obtain dice
  ...play game (no actual work)...
  return dice
endFor
```

Each group needs a different number of dice.

```
Group A needs 4 dice.
Group B needs 4 dice.
Group C needs 5 dice.
Group D needs 5 dice.
Group E needs 2 dice.
Group F needs 2 dice.
Group G needs 1 die.
Group H needs 1 die.
```

There are a total of 8 dice available, so sometimes groups must wait between requesting dice and the dice being granted and being allowed to proceed.

```
===== KPL PROGRAM STARTING =====
Initializing Thread Scheduler...
Initializing Idle Process...
A requests 4
-----Number of dice now avail = 8
A proceeds with 4
-----Number of dice now avail = 4
B requests 4
-----Number of dice now avail = 4
B proceeds with 4
-----Number of dice now avail = 0
A releases and adds back 4
-----Number of dice now avail = 4
H requests 1
-----Number of dice now avail = 4
H proceeds with 1
-----Number of dice now avail = 3
B releases and adds back 4
-----Number of dice now avail = 7
A requests 4
-----Number of dice now avail = 7
A proceeds with 4
-----Number of dice now avail = 3
C requests 5
-----Number of dice now avail = 3
F requests 2
-----Number of dice now avail = 3
G requests 1
```

-----Number of dice now avail = 3
D requests 5
-----Number of dice now avail = 3
B requests 4
-----Number of dice now avail = 3
E requests 2
-----Number of dice now avail = 3
A releases and adds back 4
-----Number of dice now avail = 7
C proceeds with 5
-----Number of dice now avail = 2
H releases and adds back 1
-----Number of dice now avail = 3
A requests 4
-----Number of dice now avail = 3
F proceeds with 2
-----Number of dice now avail = 1
H requests 1
-----Number of dice now avail = 1
F releases and adds back 2
-----Number of dice now avail = 3
C releases and adds back 5
-----Number of dice now avail = 8
G proceeds with 1
-----Number of dice now avail = 7
D proceeds with 5
-----Number of dice now avail = 2
F requests 2
-----Number of dice now avail = 2
G releases and adds back 1
-----Number of dice now avail = 3
C requests 5
-----Number of dice now avail = 3
D releases and adds back 5
-----Number of dice now avail = 8
G requests 1
-----Number of dice now avail = 8
B proceeds with 4
-----Number of dice now avail = 4
E proceeds with 2
-----Number of dice now avail = 2
B releases and adds back 4
-----Number of dice now avail = 6
A proceeds with 4
-----Number of dice now avail = 2
H proceeds with 1
-----Number of dice now avail = 1
D requests 5
-----Number of dice now avail = 1
B requests 4
-----Number of dice now avail = 1
A releases and adds back 4
-----Number of dice now avail = 5
F proceeds with 2

-----Number of dice now avail = 3
E releases and adds back 2
-----Number of dice now avail = 5
C proceeds with 5
-----Number of dice now avail = 0
H releases and adds back 1
-----Number of dice now avail = 1
F releases and adds back 2
-----Number of dice now avail = 3
A requests 4
-----Number of dice now avail = 3
E requests 2
-----Number of dice now avail = 3
G proceeds with 1
-----Number of dice now avail = 2
H requests 1
-----Number of dice now avail = 2
F requests 2
-----Number of dice now avail = 2
C releases and adds back 5
-----Number of dice now avail = 7
D proceeds with 5
-----Number of dice now avail = 2
C requests 5
-----Number of dice now avail = 2
G releases and adds back 1
-----Number of dice now avail = 3
D releases and adds back 5
-----Number of dice now avail = 8
B proceeds with 4
-----Number of dice now avail = 4
A proceeds with 4
-----Number of dice now avail = 0
G requests 1
-----Number of dice now avail = 0
B releases and adds back 4
-----Number of dice now avail = 4
E proceeds with 2
-----Number of dice now avail = 2
D requests 5
-----Number of dice now avail = 2
B requests 4
-----Number of dice now avail = 2
H proceeds with 1
-----Number of dice now avail = 1
E releases and adds back 2
-----Number of dice now avail = 3
F proceeds with 2
-----Number of dice now avail = 1
H releases and adds back 1
-----Number of dice now avail = 2
E requests 2
-----Number of dice now avail = 2
F releases and adds back 2

-----Number of dice now avail = 4
H requests 1
-----Number of dice now avail = 4
F requests 2
-----Number of dice now avail = 4
A releases and adds back 4
-----Number of dice now avail = 8
C proceeds with 5
-----Number of dice now avail = 3
A requests 4
-----Number of dice now avail = 3
G proceeds with 1
-----Number of dice now avail = 2
C releases and adds back 5
-----Number of dice now avail = 7
G releases and adds back 1
-----Number of dice now avail = 8
D proceeds with 5
-----Number of dice now avail = 3
G requests 1
-----Number of dice now avail = 3
D releases and adds back 5
-----Number of dice now avail = 8
C requests 5
-----Number of dice now avail = 8
B proceeds with 4
-----Number of dice now avail = 4
E proceeds with 2
-----Number of dice now avail = 2
D requests 5
-----Number of dice now avail = 2
B releases and adds back 4
-----Number of dice now avail = 6
E releases and adds back 2
-----Number of dice now avail = 8
H proceeds with 1
-----Number of dice now avail = 7
F proceeds with 2
-----Number of dice now avail = 5
B requests 4
-----Number of dice now avail = 5
A proceeds with 4
-----Number of dice now avail = 1
E requests 2
-----Number of dice now avail = 1
F releases and adds back 2
-----Number of dice now avail = 3
G proceeds with 1
-----Number of dice now avail = 2
F requests 2
-----Number of dice now avail = 2
H releases and adds back 1
-----Number of dice now avail = 3
A releases and adds back 4

-----Number of dice now avail = 7
C proceeds with 5
-----Number of dice now avail = 2
H requests 1
-----Number of dice now avail = 2
G releases and adds back 1
-----Number of dice now avail = 3
C releases and adds back 5
-----Number of dice now avail = 8
G requests 1
-----Number of dice now avail = 8
D proceeds with 5
-----Number of dice now avail = 3
C requests 5
-----Number of dice now avail = 3
D releases and adds back 5
-----Number of dice now avail = 8
B proceeds with 4
-----Number of dice now avail = 4
D requests 5
-----Number of dice now avail = 4
E proceeds with 2
-----Number of dice now avail = 2
F proceeds with 2
-----Number of dice now avail = 0
E releases and adds back 2
-----Number of dice now avail = 2
F releases and adds back 2
-----Number of dice now avail = 4
B releases and adds back 4
-----Number of dice now avail = 8
H proceeds with 1
-----Number of dice now avail = 7
G proceeds with 1
-----Number of dice now avail = 6
C proceeds with 5
-----Number of dice now avail = 1
E requests 2
-----Number of dice now avail = 1
H releases and adds back 1
-----Number of dice now avail = 2
C releases and adds back 5
-----Number of dice now avail = 7
G releases and adds back 1
-----Number of dice now avail = 8
D proceeds with 5
-----Number of dice now avail = 3
E proceeds with 2
-----Number of dice now avail = 1
D releases and adds back 5
-----Number of dice now avail = 6
E releases and adds back 2
-----Number of dice now avail = 8

**** A 'wait' instruction was executed and no more interrupts are scheduled... halting
emulation ****