

```
s : monitor
var s_val : integer;

procedure P;
begin
    if s_val = 0 then greater_than_zero.wait;
    s_val := s_val - 1;
    less_than_smax.signal;
end;

procedure V;
begin
    if s_val = smax then less_than_smax.wait;
    s_val := s_val + 1;
    greater_than_zero.signal;
end;
```