

EXTENDS *Integers, Sequences*

$Put(s) \triangleq Append(s, \text{"widget"})$

$Get(s) \triangleq Tail(s)$

(*****)

--algorithm *Alternate*{

variable $b = 0, box = \langle \rangle$;

process (*Producer* = 0)

 { $p1$: **while** (TRUE)

 { **await** $b = 0$;

$box := Put(box)$;

$b := 1$

 }

 }

process (*Consumer* = 1)

 { $c1$: **while** (TRUE)

 { **await** $b = 1$;

$box := Get(box)$;

$b := 0$

 }

 }

 }

(*****)