## - Module first -

## EXTENDS Integers

Variables  $i,\ pc$ 

$$\begin{array}{ll} Init & \triangleq \ (pc = \text{"start"}) \land (i = 0) \\ Pick & \triangleq \ \lor \ \land pc = \text{"start"} \\ & \land i' \in 0 \ldots 1000 \\ & \land pc' = \text{"middle"} \\ Add1 & \triangleq \\ & \lor \ \land pc = \text{"middle"} \\ & \land i' = i + 1 \\ & \land pc' = \text{"done"} \\ \end{array}$$

 $Next \triangleq Pick \lor Add1$