

```

|----- MODULE appex1_1 -----|
| modules de base importables |
| EXTENDS Naturals, Integers, TLC |
|-----|
| CONSTANTS max |
|-----|
| VARIABLES np |
|-----|
| tentative 1 |
| entrer  $\triangleq np' = np + 1$  |
| sortir  $\triangleq np' = np - 1$  |
| next  $\triangleq entrer \vee sortir$  |
| init  $\triangleq np = 0$  |
|-----|
| tentative 2 |
| entrer2  $\triangleq np < max \wedge np' = np + 1$  |
| next2  $\triangleq entrer2 \vee sortir$  |
|-----|
| tentative 3 |
| sortir2  $\triangleq np > 0 \wedge np' = np - 1$  |
| next3  $\triangleq entrer2 \vee sortir2$  |
|-----|
| Safety1  $\triangleq max \in Int$  |
| Safety2  $\triangleq np \leq max$  |
| Safety3  $\triangleq np \geq 0$  |
| question1  $\triangleq np \neq 6$  |
| Safety  $\triangleq Safety2 \wedge Safety3$  |
|-----|

```