MODULE *Example2_Deadlock*

Example of a net where tokens can never make it to a sink place. "t1" will never be able to fire because all input places will not have a token ("p1" will never have a token).

```
              ------
source -> |  t1  | -> sink
              ------
      p1 ------^
```

$Places \triangleq \{$"source", "p1", "sink"$\}$ Define the bad net.
$Transitions \triangleq \{$"t1"$\}$
$Arcs \triangleq [$
$\quad source \mapsto \{$"t1"$\}$,
$\quad p1 \mapsto \{$"t1"$\}$,

$\quad t1 \mapsto \{$"sink"$\}$
$]$
$ArcWeights \triangleq \langle\rangle$ Unspecified arc weights default to 1.
$InitialMarking \triangleq [source \mapsto 1]$
VARIABLE *Marking*

$PN \triangleq$ INSTANCE *PetriNet* Instantiate it within a namespace.

$Spec \triangleq PN!Spec$ Make *Spec* and *Invariants* available for the config file.

$Invariants \triangleq PN!Invariants$

Properties

Eventually, we arrive as a expected final marking.
$FinalMarking \triangleq PN!FinalMarking([sink \mapsto 1])$