

## Exercise: implementing temporal properties

1. Returns false until A occurs, then returns true from the subsequent instant onward

```
node after(a : bool) returns (o : bool);  
--- make clean; make MAIN=after TRACE=trace1.txt
```

2. Returns true if and only if its first input has been continuously true since the last time its second input was true

```
node always_since(b, a : bool) returns (o : bool);  
--- make clean; make MAIN=always_since TRACE=trace2.txt
```

3. Returns true if and only if its first input has been true at least once since the last time its second input was true.

```
node once_since(c, a : bool) returns (o : bool);  
--- make clean; make MAIN=once_since TRACE=trace3.txt
```

4. Any time A has occurred in the past, either B has been continuously true, or C has occurred at least once, since the last occurrence of A

```
node always_from_to(b, a, c : bool) returns (x : bool);  
--- make clean; make MAIN=always_from_to TRACE=trace4.txt
```