

## Problem Wk.3.1.6: Feedback SM

Read Section 4.2.3 of the Notes, about feedback composition of state machines.

Define `negate` to be an instance of a `sm.PureFunction` machine that takes a `Boolean` as input and returns the negation of that `Boolean`.

Use `sm.Feedback`, `sm.Cascade`, `negate` (and `sm.Delay` if you need it), to construct a state machine instance whose output alternates between `True` and `False` for any input sequence; starting with `True`. Set the instance to be the value of the variable `alternating`.

```
# Replace the None's with your code
negate = sm.PureFunction(None)
alternating = None
```

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