

Problem Wk.3.1.2: Cascading Machines

Write the `Cascade` combinator for state machines described in the class notes. Make sure that you have read Section 4.2 of the course notes (about `Cascade` and `Parallel`).

Your implementation should read the `startState` attribute and call the `getNextValues` method of the machines being composed.

Recall that calling `getNextValues` is not supposed to **change** the state of a machine; it is supposed to return what the next state should be without actually changing it. So, using the machine produced by `Cascade` should not change the states of the input machines, since it only uses `getNextValues` of those machines. Similarly, `Cascade`'s `getNextValues` method should not change the state of the composite machine.

```
class Cascade(sm.SM):
    def __init__(self, sm1, sm2):
        pass

    def getNextValues(self, state, inp):
        pass
```

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