Problem Wk.3.1.1: Simulating Cascade

You are given the following state machines:

```
class Delay(sm.SM):
    def __init__(self, v0):
        self.startState = v0
    def getNextValues(self, state, inp):
        # Output is old state
        return (inp, state)

class Increment(sm.SM):
    startState = 0
    def __init__(self, incr):
        self.incr = incr
    def getNextValues(self, state, inp):
        return (state, inp + self.incr)
```

Consider the following cascaded compositions of state machines and fill in the the behavior tables.

1.
```
sm1 = Delay(1)
sm2 = Delay(2)
c = sm.Cascade(sm1, sm2)
c.transduce([3,5,7,9])
```

	t=0	**t=1**	**t=2**	**t=3**	**t=4**
sm1 input	3	5	7	9	
sm1 state	1				
sm1 output					
sm2 input					
sm2 state	2				
sm2 output					

2.
```
sm1 = Delay(1)
sm2 = Increment(3)
c = sm.Cascade(sm1, sm2)
c.transduce([3,5,7,9])
```

	t=0	**t=1**	**t=2**	**t=3**	**t=4**
sm1 input					
sm1 state					
sm1 output					
sm2 input					
sm2 state					
sm2 output					