

## Problem Wk.2.1.3: Double Delay State Machine

Write a (non-terminating) state machine class (assume you have the [sm.SM class](#)) that delays its input by two time steps, so output at time  $i$  is the input at time  $i-2$ . The class should take two arguments, which will be the outputs of the machine at times 0 and 1.

```
sm = Delay2Machine(100, 10)
```

We encourage you to debug this on your machine in Idle. You can work in the file `swLab02Work.py`. Open it in Idle, enter your class definition and testing examples in that file, and do Run Module to execute.

**It is essential that the `__init__` and `getNextValues` methods in any state machine not set or read any instance variables except `self.startState` (not even `self.state`). All memory (state) must be in the state argument to `getNextValues`. Look at the examples in the course notes, section 4.1.**

```
class Delay2Machine(sm.SM):
    def __init__(self, val0, val1):
        self.startState = '' # fix this
        pass
    def getNextValues(self, state, inp):
        pass
```

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