6.004 Fall 2018
L12 – Non-pipelined Multicycle Processors
Take-Home Problem

Due at the beginning of recitation R12 on Friday October 19.

Discuss the viability and pros/cons of modifying the doExecute rule on L21 Slide 17 as follows:

```plaintext
module mkProcMulticycle(Empty);
...
rule doExecute if (state == Execute);
let inst <- mem.resp;
Code to 1. execute all instructions except
Memory and multicycle instructions; go to Fetch
Initiate instruction fetch
Or 2. initiate memory access; go to LoadWait
Or 3. initiate multicycle instruction; go to MCWait
...
endmodule
```