

Bryan Arnold

CSE 3666

Architecture Assignment 8

3/16/17

- 1) Dependencies are highlighted in the same color of the register they depend on:

Instruction Sequence:

lw **\$t0**, 0 (\$a0)

addi **\$t9**, \$zero, 53

mult **\$t9**, **\$t0**

mflo **\$t0**

lw **\$t1**, 4 (\$a0)

lw **\$t1**, 0 (**\$t1**)

addi **\$t1**, **\$t1**, -9

addi **\$t9**, \$zero, 7

mult **\$t9**, **\$t1**

mflo **\$t1**

add **\$t0**, **\$t0**, **\$t1**

sw **\$t0**, 0 (\$a0)

- 2) LW, ADDI, NOP, NOP, MULT, NOP, MFLO, LW, NOP, NOP, LW, NOP, NOP, ADDI, ADDI, NOP, NOP, MULT, NOP, MFLO, NOP, NOP, ADD, NOP, NOP, SW.
- 3) LW, ADDI, NOP, MULT, MFLO, LW, NOP, LW, NOP, ADDI, ADDI, MULT, MFLO, ADD, SW.