Brian Pham

Homework 08

1 4.9.2)   or   r1   r2   r3

          NOP

          NOP

          or   r2   r1   r4

          NOP

          NOP

          or   r1   r1   r2

4.9.3) With Full Forwarding, there is no need
         for NOP instructions

4.9.4) Total Execution Time

   without Forwarding : $11 \cdot 250 = 2750ps$

   with Forwarding : $7 \cdot 300 = 2100\ ps$

   Speedup   → $2750/2100 = 1.31$

2   T   NT   T   T   NT   T   T   T   NT   T

a) x   x   x   ✓   x   x   ✓   ✓   x   x   3/10

                                                    30% accuracy

                                              00 → strong NT ; 11 → strong T

b) 00   01   00   01   10   01   10   11   11   10

    x   ✓   x   x   x   x   ✓   ✓   x   ✓   4/10

                                                    40% accuracy