CS 347, Spring 1998
Lab 3 Prologue Handin

Names and Andrew IDs of Team Members

1. Correct Version, Stall mode, `pipe1.O`

Instr	c_0	c_1	c_2	c_3	c_4	c_5	c_6	c_7	c_8	c_9	c_{10}	c_{11}
ldq $4, 64($3)												
addq $3,0x4,$5												
addq $4,$5,$2												
ldq $5,44($2)												
addq $5,0x8,$3												
ldq $7,56($3)												
stq $7,8($3)												

Instr	c_{12}	c_{13}	c_{14}	c_{15}	c_{16}	c_{17}	c_{18}	c_{19}	c_{20}	c_{21}	c_{22}	c_{23}
ldq $4, 64($3)												
addq $3, 0x4,$5												
addq $4,$5,$2												
ldq $5,44($2)												
addq $5,0x8,$3												
ldq $7,56($3)												
stq $7,8($3)												

2. Buggy Version, Stall mode, `pipe1.O`

Instr	c_0	c_1	c_2	c_3	c_4	c_5	c_6	c_7	c_8	c_9	c_{10}	c_{11}
ldq $4, 64($3)												
addq $3,0x4,$5												
addq $4,$5,$2												
ldq $5,44($2)												
addq $5,0x8,$3												
ldq $7,56($3)												
stq $7,8($3)												

Instr	c_{12}	c_{13}	c_{14}	c_{15}	c_{16}	c_{17}	c_{18}	c_{19}	c_{20}	c_{21}	c_{22}	c_{23}
ldq $4, 64($3)												
addq $3, 0x4,$5												
addq $4,$5,$2												
ldq $5,44($2)												
addq $5,0x8,$3												
ldq $7,56($3)												
stq $7,8($3)												

Describe where the bug occurs and its effect on the program:

3. Correct Version, Forwarding mode, `pipe1.O`

Instr	c_0	c_1	c_2	c_3	c_4	c_5	c_6	c_7	c_8	c_9	c_{10}	c_{11}	c_{12}	c_{13}
ldq \$4, 64(\$3)														
addq \$3,0x4,\$5														
addq \$4,\$5,\$2														
ldq \$5,44(\$2)														
addq \$5,0x8,\$3														
ldq \$7,56(\$3)														
stq \$7,8(\$3)														

4. Buggy Version, Forwarding mode, `pipe1.O`

Instr	c_0	c_1	c_2	c_3	c_4	c_5	c_6	c_7	c_8	c_9	c_{10}	c_{11}	c_{12}	c_{13}
ldq \$4, 64(\$3)														
addq \$3,0x4,\$5														
addq \$4,\$5,\$2														
ldq \$5,44(\$2)														
addq \$5,0x8,\$3														
ldq \$7,56(\$3)														
stq \$7,8(\$3)														

Describe where the bug occurs and its effect on the program:

5. Correct Version, Stall mode, `pipe2.O`

Instr	c_0	c_1	c_2	c_3	c_4	c_5	c_6	c_7	c_8	c_9	c_{10}	c_{11}
addq $31, 0x10, $3												
bne $3, targ1												
addq $3, $3, $4												
addq $3, $4, $5												
addq $3, $5, $6												
targ1: addq $3, $3, $7												
beq $7, targ2												
addq $3, $7, $1												
targ2: addq $3, $7, $2												

Instr	c_{12}	c_{13}	c_{14}	c_{15}	c_{16}	c_{17}	c_{18}	c_{19}	c_{20}	c_{21}	c_{22}	c_{23}
targ1: addq $3, $3, $7												
beq $7, targ2												
addq $3, $7, $1												
targ2: addq $3, $7, $2												

6. Buggy Version, Stall mode, `pipe2.O`

Instr	c_0	c_1	c_2	c_3	c_4	c_5	c_6	c_7	c_8	c_9	c_{10}	c_{11}
addq \$31, 0x10, \$3												
bne \$3, targ1												
addq \$3, \$3, \$4												
addq \$3, \$4, \$5												
addq \$3, \$5, \$6												
targ1: addq \$3, \$3, \$7												
beq \$7, targ2												
addq \$3, \$7, \$1												
targ2: addq \$3, \$7, \$2												

Instr	c_{12}	c_{13}	c_{14}	c_{15}	c_{16}	c_{17}	c_{18}	c_{19}	c_{20}	c_{21}	c_{22}	c_{23}
targ1: addq \$3, \$3, \$7												
beq \$7, targ2												
addq \$3, \$7, \$1												
targ2: addq \$3, \$7, \$2												

Describe where the bug occurs and its effect on the program:

7. Correct Version, Forwarding mode, `pipe2.O`

Instr	c_0	c_1	c_2	c_3	c_4	c_5	c_6	c_7	c_8	c_9	c_{10}	c_{11}	c_{12}	c_{13}
addq \$31, 0x10, \$3														
bne \$3, targ1														
addq \$3, \$3, \$4														
addq \$3, \$4, \$5														
addq \$3, \$5, \$6														
targ1: addq \$3, \$3, \$7														
beq \$7, targ2														
addq \$3, \$7, \$1														
targ2: addq \$3, \$7, \$2														

8. Buggy Version, Forwarding mode, `pipe2.O`

Instr	c_0	c_1	c_2	c_3	c_4	c_5	c_6	c_7	c_8	c_9	c_{10}	c_{11}	c_{12}	c_{13}
addq \$31, 0x10, \$3														
bne \$3, targ1														
addq \$3, \$3, \$4														
addq \$3, \$4, \$5														
addq \$3, \$5, \$6														
targ1: addq \$3, \$3, \$7														
beq \$7, targ2														
addq \$3, \$7, \$1														
targ2: addq \$3, \$7, \$2														

Describe where the bug occurs and its effect on the program: