EECE 7352: Computer Architecture

Assignment 2

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12345 IF ID EX MEM WB

IF ID EX MEM WB

IF STALL ID Sub IF ID EX MEM MIR

IF IT TO IT ADD BR BUL Loc → SUB ADD BR ANUL Loc -> SUB ADD BR_ EXE MEM MB ...
ID EXE MEM MB MUL 4 20 cycles

IF ID EX MEM WB

IF STALL ID

IF ID EX MEM WB

IF ID EX MEM WB

IF ID EX MEM WB

IF IST ID

IF Sub ADD BR Loc → SUB IF ID EX MEN WB

IF ID EX MEN WB

IF ID EX MEN WB

IF ID EX MEN WB ADD BR LOC -> SUB ADD BR_ MUL IJ 18 cycles

Qs. 4 5 IF D EX MEM WB 6

STALL ID EX MEM WB

IF ID STALL EX MEM WB D MUL 1F D SUB lo cycles Q4. 3 4 5 IF MEM WB

LD IF ID EX MEM WB

SUB IF ID STALL EX MEM WB

BR IF STALL ID

MUL IF ID EXE MEM W

9 cycles