PART A:

Small Trace
SuperScalar Width → 1 && No Forwarding && Perfect Prediction

LAB2_NUM_INST	:	100
LAB2_NUM_CYCLES	:	122
LAB2_CPI	:	1.220
LAB2_branch_mispred	:	0
LAB2_num_branches	:	15

Superscalar Width → 2 && No Forwarding

LAB2_NUM_INST	:	100
LAB2_NUM_CYCLES	:	77
LAB2_CPI	:	0.770
LAB2_branch_mispred	:	0
LAB2_num_branches	:	15

Superscalar Width → 2 && Forwarding

LAB2_NUM_INST	:	100
LAB2_NUM_CYCLES	:	57
LAB2_CPI	:	0.570
LAB2_branch_mispred	:	0
LAB2_num_branches	:	15

Part B (With Branch Prediction)

Always Taken

LAB2_NUM_INST	:	100
LAB2_NUM_CYCLES	:	80
LAB2_CPI	:	0.800
LAB2_branch_mispred	:	7
LAB2_num_branches	:	15

GShare

LAB2_NUM_INST	:	100
LAB2_NUM_CYCLES	:	80
LAB2_CPI	:	0.800
LAB2_branch_mispred	:	7
LAB2_num_branches	:	15