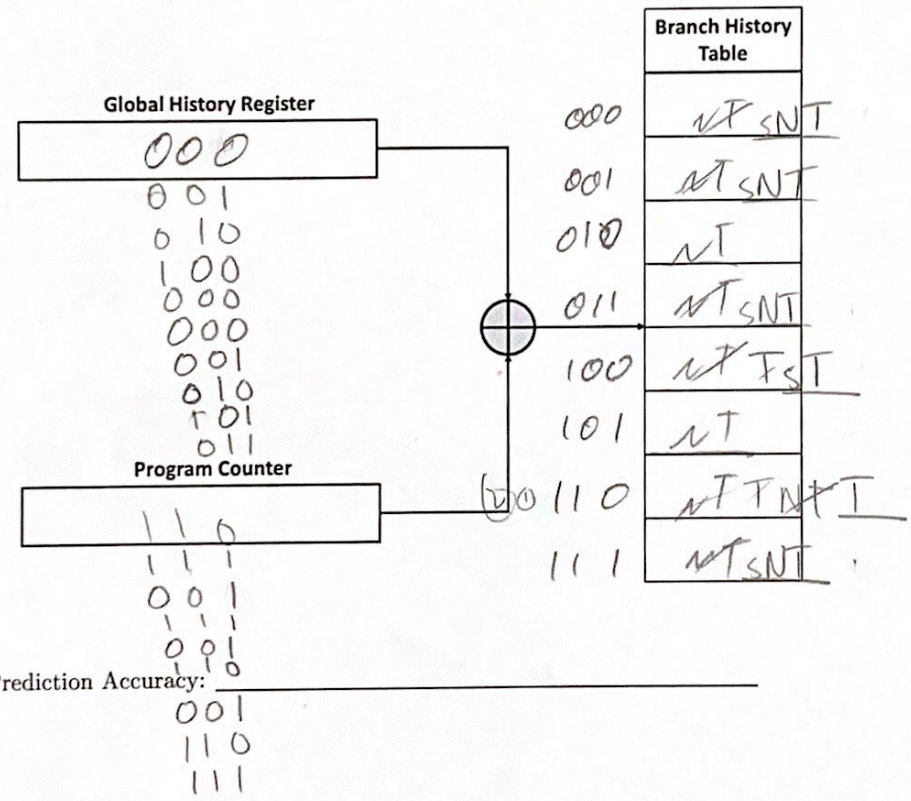
2-Level Adaptive Branch Prediction. The following table shows the branch outcomes for three commonly occurring branches in a given program. Assuming that the given branching pattern repeats for a long period of time (e.g., in an infinite loop), fill in the contents of the predictor tables and history registers for each of the branch predictors below, once they reach *steady-state* (i.e, when they start making consistent predictions). Further, compute the steady-state prediction accuracy of each predictor.

Branch PC (in hex)	Outcome
0x1c6	T
0x21f	NT
0x309	NT
0x21f	NT
0x309	NT
0x1c6	T
0x309	NT
0x1c6	T
0x21f	T

Gshare Correlating Predictor. The predictor has a 3-bit wide Global History Register (GHR), the contents of which is XOR'd with the least significant 3 bits of the program counter, to index into an 8-entry 2-bit wide Branch History Table (BHT).



Steady-State Prediction Accuracy: _____