Data path example for LOADB r1=data_mem[r0]

Control signals	Demux	Reg Write	ALU-1st-Src	ALUop	ALU control	Mem Read	MemWrite	Mem2Reg	PC-Input-Mux-Src	PC-Mux-S
OPTR r0	1	0	-	00001	-	-	-	-	-	1
LOADB r1	0	1	1	01010	Pass up-input directly	1	0	1	-	1

// load 1 byte from data_mem[r0] to reg r1