Memory Instructions

Instructions	Description	Notes	Example
MOVx op1, op2	op2 ← op1	x = {L, W, B}	MOVB $-1,%AL
MOVSxy op1, op2	op2 ← ExtSign(op1)	xy = {BW, BL, WL}	MOVSBW %CH,%AX
MOVZxy op1, op2	op2 ← ExtZero(op1)	xy = {BW, BL, WL}	MOVZWL %BX,%EDX
PUSHL op1	%ESP ← %ESP – 4; M[%ESP] ← op1		PUSHL 12(%EBP)
POPL op1	op1 ← M[%ESP]; %ESP ← %ESP + 4;		POPL %EAX
LEAL op1, op2	op2 ← &op1	op1: memory	LEAL (%EBX,%ECX),%EAX

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It is a temporary storage memory. When the computing task is complete, the memory of the variable will be automatically erased.

The stack section mostly contains methods, local variables, and reference variables.