

Binary Op Code	Operation	Meaning
0000	LOAD X	$CON(X) \rightarrow R$
0001	STORE X	$R \rightarrow CON(X)$
0010	CLEAR X	$0 \rightarrow CON(X)$
0011	ADD X	$R + CON(X) \rightarrow R$
0100	INCREMENT X	$CON(X) + 1 \rightarrow CON(X)$
0101	SUBTRACT X	$R - CON(X) \rightarrow R$
0110	DECREMENT X	$CON(X) - 1 \rightarrow CON(X)$
0111	COMPARE X	if $CON(X) > R$ then $GT = 1$ else $GT = 0$ if $CON(X)$ is equal to R then $EQ = 1$ else $EQ = 0$ if $CON(X) < R$ then $LT = 1$ else $LT = 0$
1000	JUMP X	$X \rightarrow PC$
1001	JUMPGT X	if GT is 1, $X \rightarrow PC$
1010	JUMPEQ X	if EQ is 1, $X \rightarrow PC$
1011	JUMPLT X	if LT is 1, $X \rightarrow PC$
1100	JUMPNEQ X	if EQ is 0, $X \rightarrow PC$
1101	IN X	Read in a value and store it in memory cell X
1110	OUT X	Print out the value in memory cell X
1111	HALT	Stops the program