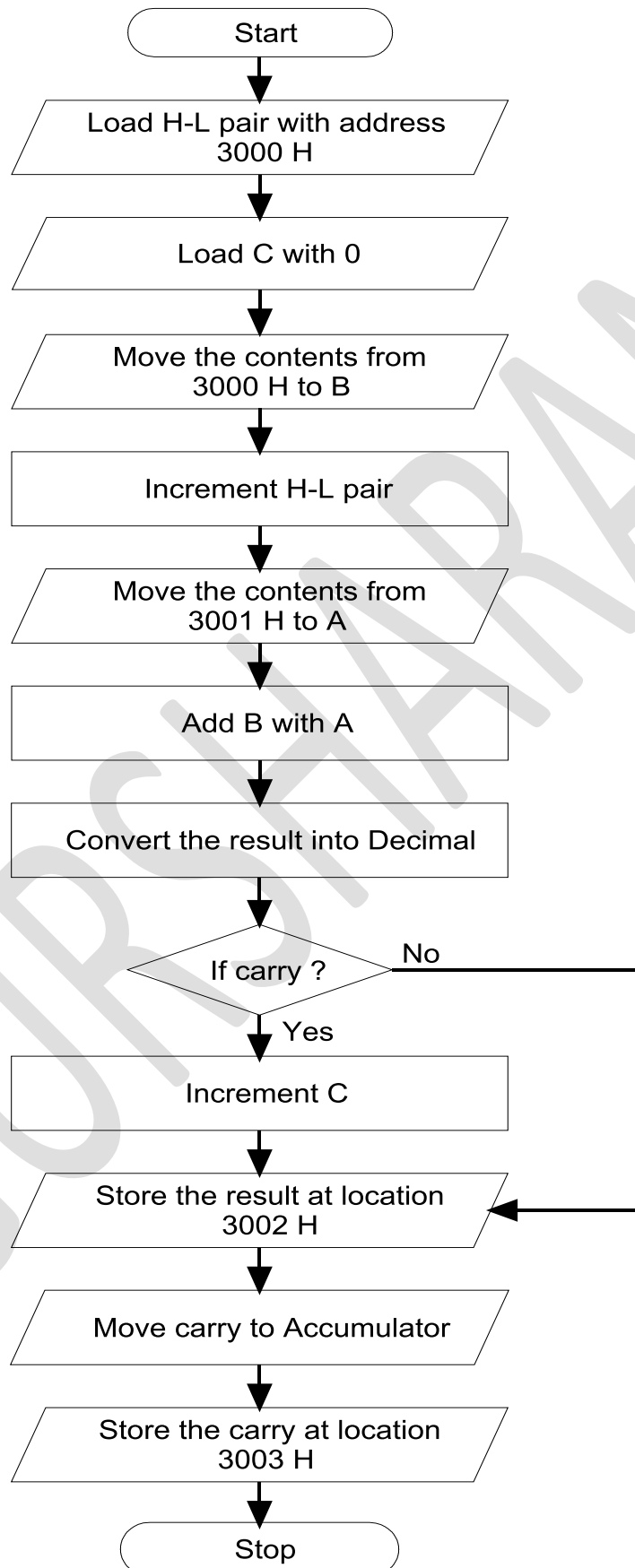


Flow Chart to Add Two 8-bit Numbers and Show Result in Decimal



Program to Add Two 8-bit Numbers and Show Result in Decimal

Address	Mnemonics	Operand	Opcode	Remarks
2000	LXI	H, 3000 H	21	Load H-L pair with address 3000 H
2001			00	
2002			30	
2003	MVI	C, 00 H	0E	Move 0 to C
2004			00	
2005	MOV	B, M	46	Move the contents from 3000 H to B
2006	INX	H	23	Increment H-L pair
2007	MOV	A, M	7E	Move the contents from 3001 H to A
2008	ADD	B	80	Add B with A
2009	DAA		27	Convert the result into Decimal
200A	JNC	200E H	D2	Jump to location 200E H if no carry
200B			0E	
200C			20	
200D	INR	C	0C	Increment C
200E	STA	3002 H	32	Store the result at location 3002 H
200F			02	
2010			30	
2011	MOV	A, C	79	Move carry to A
2012	STA	3003 H	32	Store the carry at location 3003H
2013			03	
2014			30	
2015	HLT		76	Halt

Before Execution:

3000: 05 H

3001: 03 H

After Execution:

3002: 08 H