DELTA Pg No.
Date / /

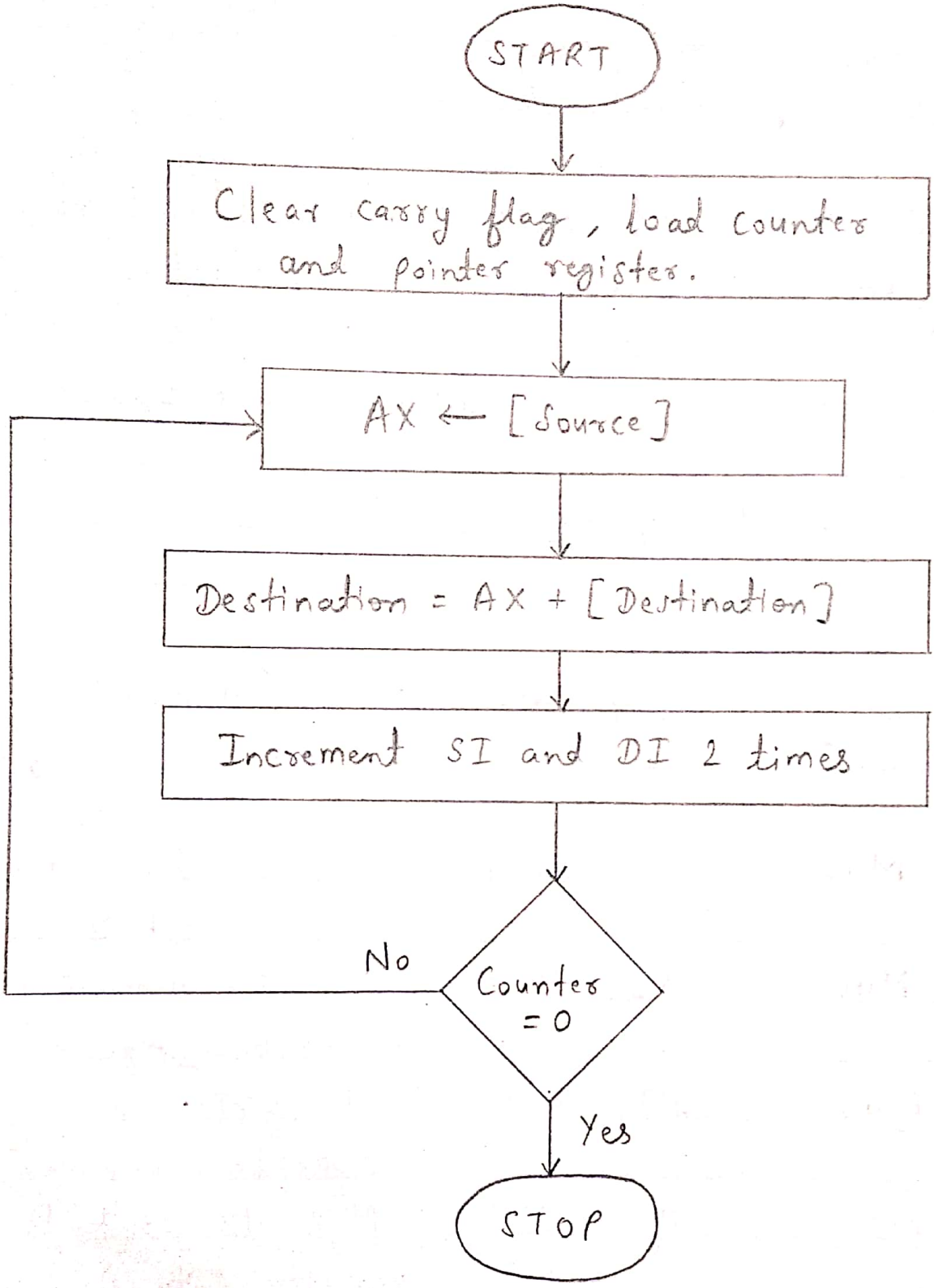
Experiment - 6

Aim :- To add two eight byte number stored at location 0000 : 1300 to 0000 : 1307 with the number stored at location 0000 : 1308 to 0000 : 130F, the result is stored from location 0000 : 1308 onwards.

Apparatus :- 8086 Microprocessor kit.

Code :-

Address	Mnemonics	Operands	Comments
1000	CLC		Clear carry flag
1001	MOV	CX, 0004	Set counter register C with 4
1004	MOV	SI, 1300	Set 1300 memory location as the base register of SI.
1007	MOV	DI, 1308	Set 1308 memory location as the base register of DI.
100A	MOV	AX, [SI]	Move the contents of SI register into Accumulator.
100C	ADC	[DI], AX	Add with carry the contents of DI Reg. & Acc.
100E	INC	SI	Increment source register
100F	INC	SI	Increment source register



Address	Mnemonics	Operands	Comments
1010	INC	DI	Increment destination register
1011	INC	DI	Increment destination register
1012	DEC	CX	Decrement Counter
1013	JNZ	100A	Jump if not zero to memory location 100A
1015	INT	A5	

Output :-

Memory Address	Before Execution	After Execution
1300	11	11
1301	11	11
1302	11	11
1303	11	11
1304	11	11
1305	11	11
1306	11	11
1307	11	11
1308	22	33
1309	22	33
130A	22	33
130B	22	33

Memory Address	Before Execution	After Execution
130C	22	33
130D	22	33
130E	22	33
130F	22	33

Result :- Successfully implemented the addition of two 8-byte numbers.