

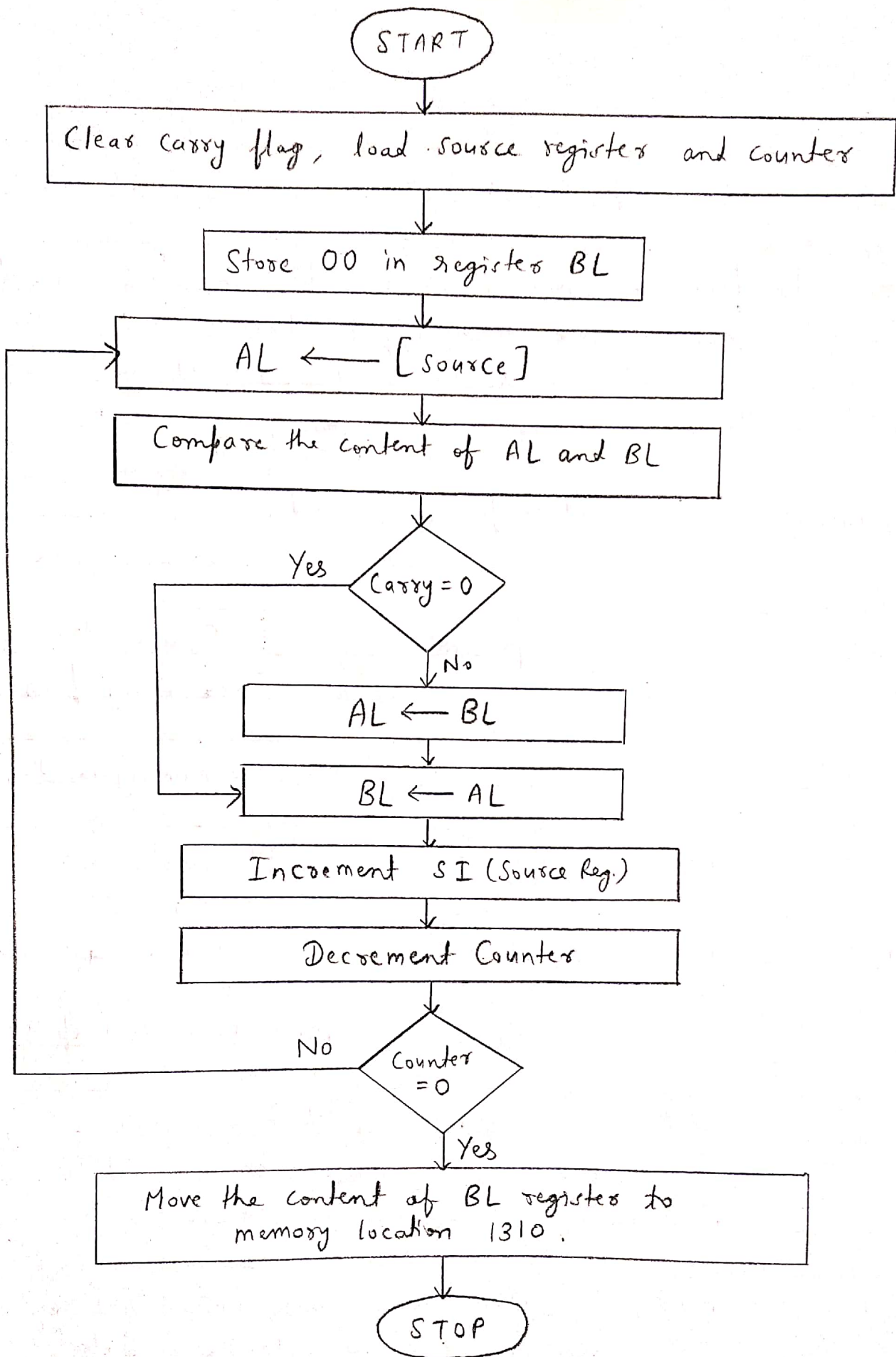
Experiment - 7

Aim:- To find the maximum number in a given string (16 bytes long) from memory location 0000:1300 to 0000:130F and store the result in location 0000:1310.

Apparatus :- 8086 Microprocessors kit.

Code :-

Address	Mnemonics	Operands	Comments
1000	CLC		Clear carry flag
1001	MOV	SI, 1300	Set 1300 memory location as the base register of SI.
1004	MOV	CX, 000F	Set counter register C with 000F
1007	MOV	BL, 00	Store the value 00 in the register B
1009	MOV	AL, [SI]	Move the content of SI reg. into Accumulator
100B	CMP	AL, BL	Compare the content of reg. B with accumulator
100D	JNC	1011	Jump to location 1011 when there is no carry.
100F	MOV	AL, BL	Move the content of reg. B to accumulator



Address	Mnemonics	Operands	Comments
1011	MOV	BL, AL	Move the content of accumulator to register B.
1013	INC	SI	Increment source register.
1014	DEC	CX	Decrement Counter
1015	JNZ	1009	Jump if not zero to location 1009
1017	MOV	[1310], BL	Move the content of B to the location 1310
1019	INT	AS	

Output :-

Memory Address	Before Execution	After Execution
1300	00	00
1301	01	01
1302	02	02
1303	04	04
1304	03	03
1305	05	05
1306	07	07
1307	06	06
1308	0F	0F
1309	09	09

Memory Address	Before Execution	After Execution
130A	08	08
130B	0A	0A
130C	0D	0D
130D	0E	0E
130E	0B	0B
130F	0C	0C
1310	<u>00</u>	<u>0F</u>

Result :- Successfully implemented the program to find maximum no. in a given string.