

## Experiment - 3

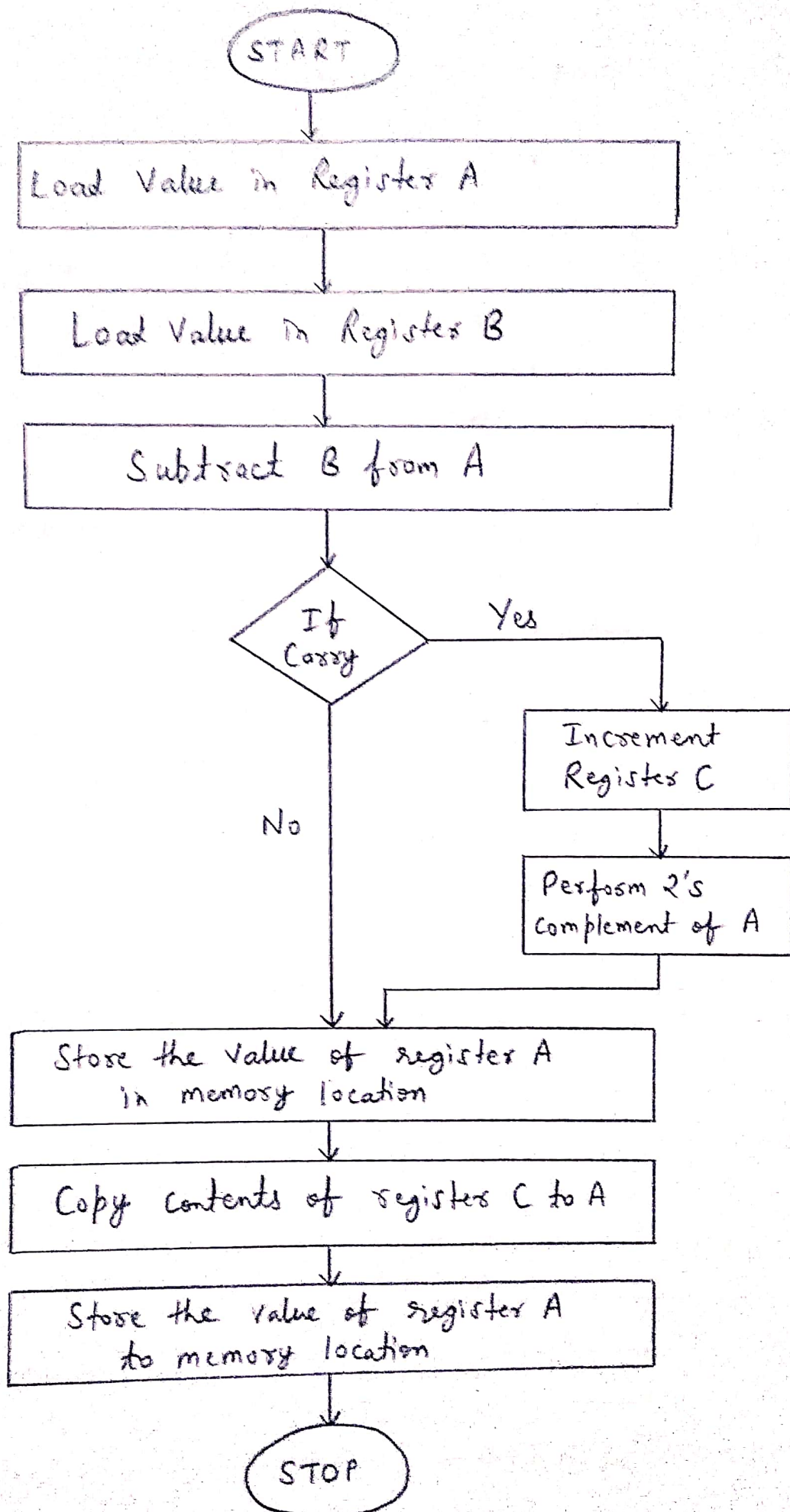
Aim :- WAP to subtract two 8-bit numbers when  
(i) First number is greater (ii) Second no. is greater.

(i) First number is greater :-

Memory Address	Mnemonics	Operand	Opcode
2000	MVI A		3E
2001		50	50
2002	MVI B		06
2003		20	20
2004	SUB B		90
2005	STA		32
2006		20	20
2007		20	20
2008	HLT		76

Result :-

Memory Address	Value before Execution	Value after Execution
2020	FF H	30 H





(ii) When Second number is greater :-

Memory Address	Mnemonics	Operand	Opcode
2000	MVI A		
2001			3E
2002	MVI B	20	
2003			06
2004	SUB B	30	
2005	JNC		90
2006			D2
2007		0B	
2008		20	0B
2009	INR C		20
200A	CMA		06
200B	INR A		2F
200C	STA		3C
200D		20	32
200E		20	20
200F	MOV A,C		20
2010	STA		79
2011		21	32
2012		20	21
2013	HLT		20
			76

Result 1-

Memory Address	Values before execution	Values after execution
2020	00 H	F0 H
2021	00 H	01 H