

Experiment - 3

Aim :- WAP to subtract two 8-bit numbers when

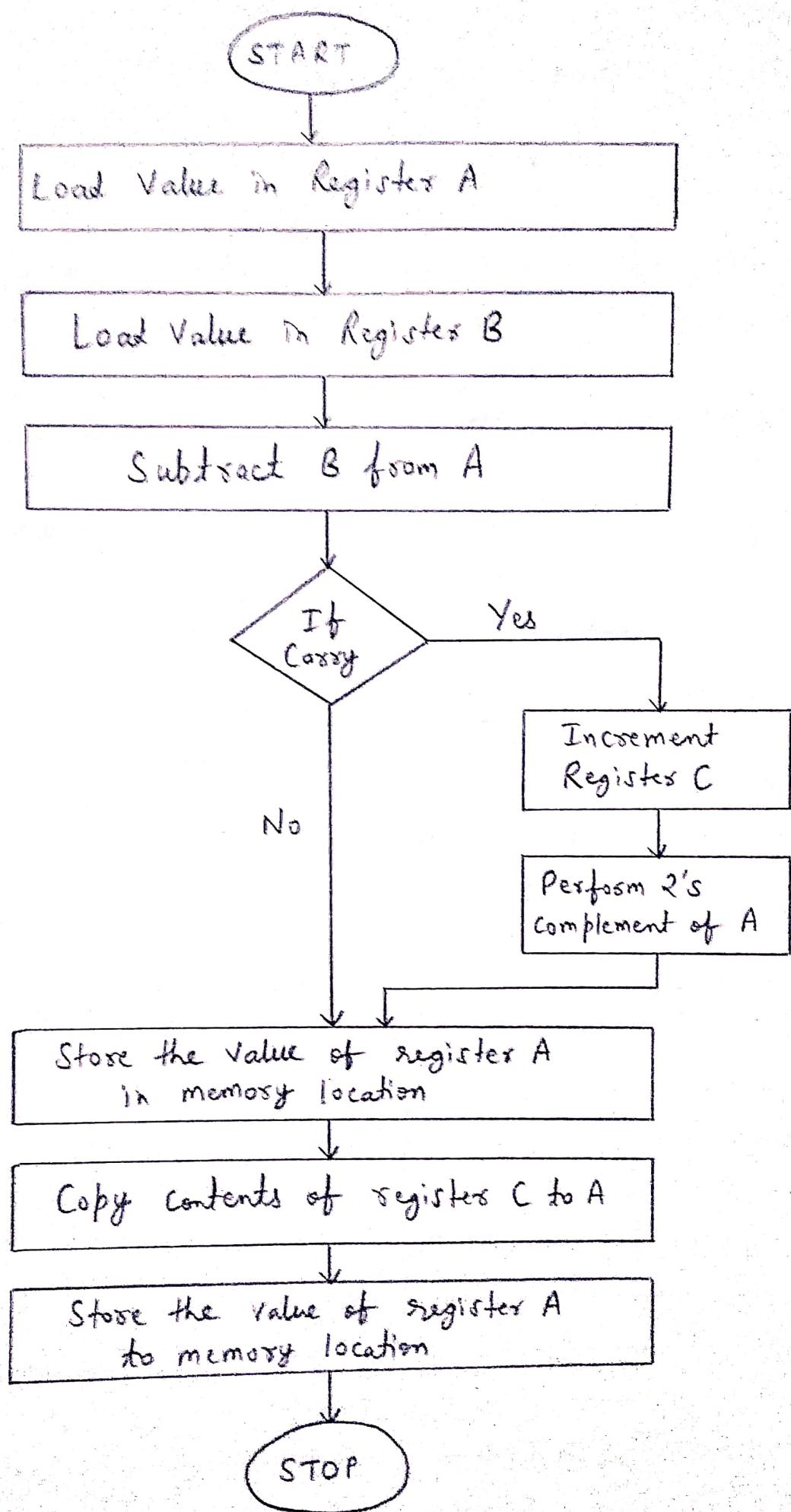
(i) First number is greater (ii) Second no. is greater.

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

Result :-

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