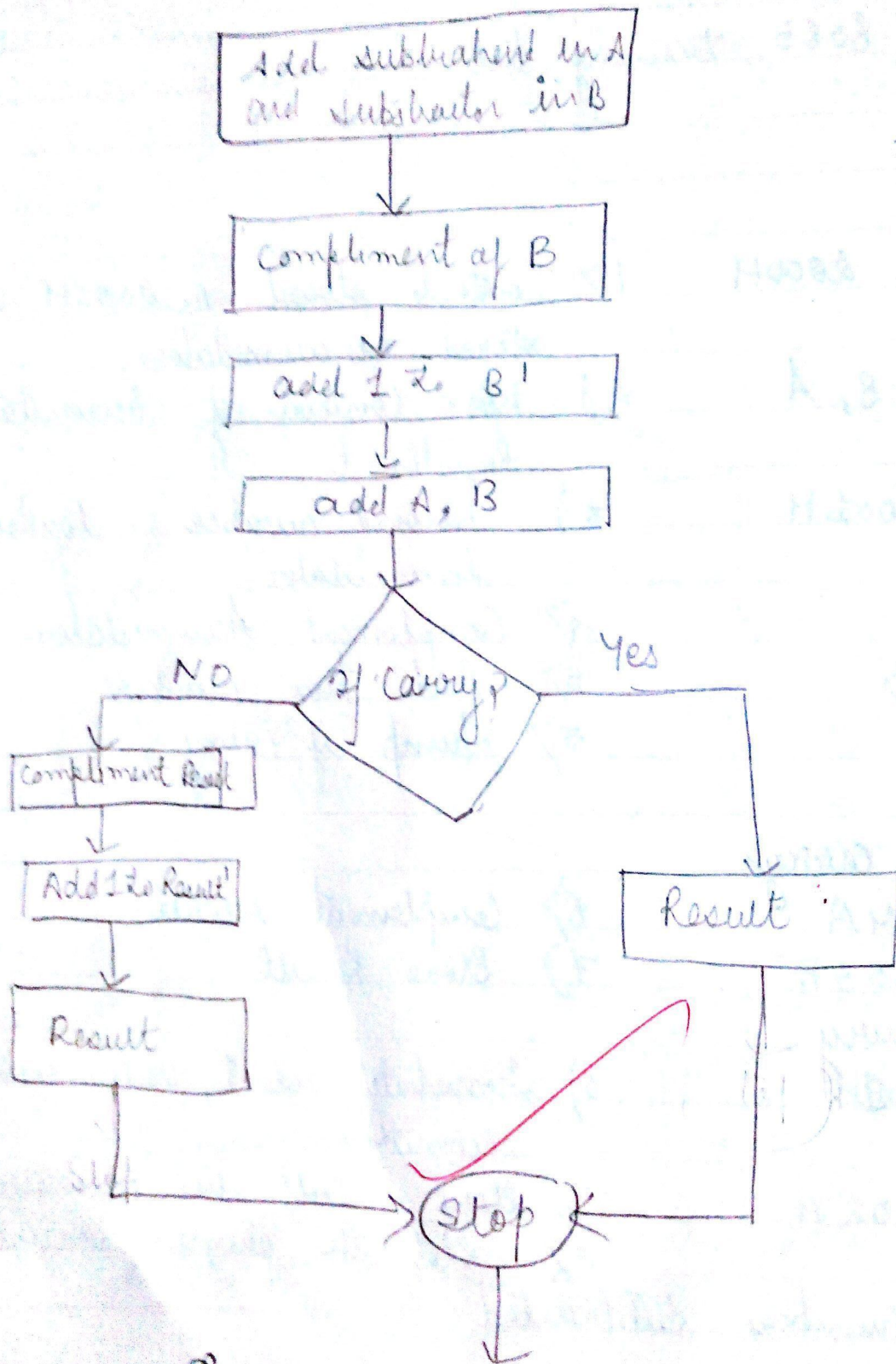


EXPERIMENT - NO-5

AIM write a program to implement subtraction using 2's Complement.



Subtraction using 2's Complement

EXPERIMENT - NO-5

Date: _____
Page: _____

AIM:- Write a program to implement subtraction using 2's complement.

Apparatus:- 8085 trainer kit

Program:-

- | | | |
|--------|--------------------------------|--|
| Step-1 | LDA 2000H | 1) Content stored in 2000H. will be stored in accumulator. |
| Step-2 | MOV B, A | 2) Move content of accumulator to register B. |
| Step-3 | LDA 2001H. | 3) Second number is loaded into accumulator. |
| Step-4 | CMA | 4) Complement accumulator |
| Step-5 | ADI 01H. | 5) Immediately add 1 with content of accumulator. |
| Step-6 | ADD B. | 6) Add contents of B with content of accumulator. |
| Step-7 | JNC | 7) Jump if ^{no} carry. |
| Step-8 | If carry.
STA 2003H. | 8) Store Result |
| Step-9 | If no carry.
CMA
ADI 01H | 9) Complement Result
10) Immediate add 1 with content of accumulator. |
| | STA 2002H | 11) Store Result in memory 2002H |
| | HLT | 12) Stop the program execution |

Result:- Numbers has been subtracted

Avy
10/10/22