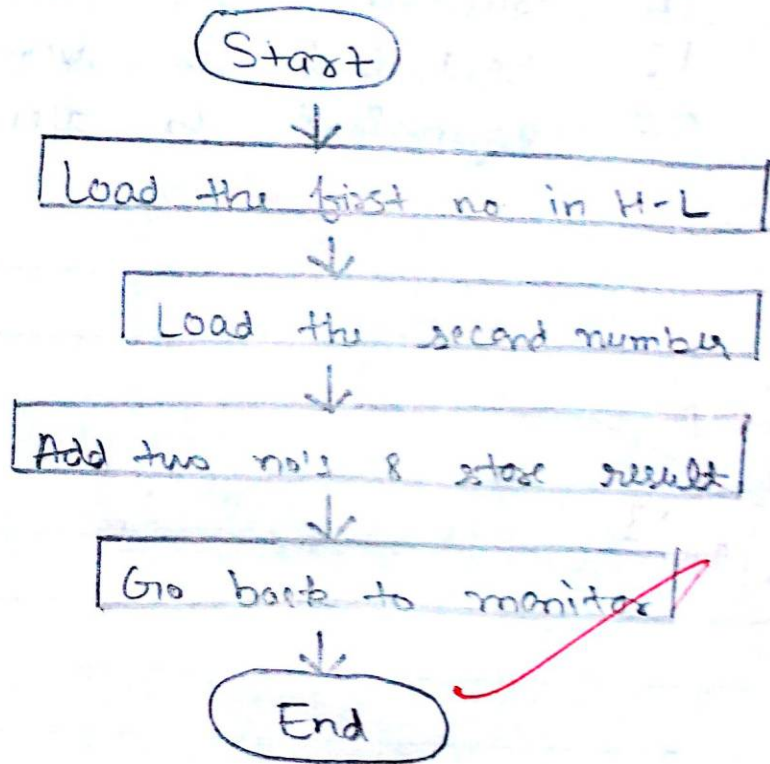


## Practical-3

AIM → Addition of two 16 bit no.

Description → This program will add two 16 bit no. lying at 2000, 2001, 2002 and 2003. The result is stored at 2004 and 2005. Carry is neglected.

Procedure →



## Practical No - 3

AIM → Add two 16 bit numbers.

Description → This program will add two 16 bit no. lying at 2000, 2001, 2002 and 2003. The result is stored at 2004 and 2005. Carry is neglected.

Steps ↓

1. Load the first number in H-L.
2. Load the second number.
3. Add the two no. & store result
4. Go back to monitor

Address	Code	Label	Mnemonic	Operand	Comments
2000	1st no	LSB			1st sixteen bit no.
2001	1st no.	MSB			
2002	2nd no.	LSB			
2003	2nd no.	MSB			2nd sixteen bit no.
2004	RESULT	LSB			Result of addition
2005	RESULT	MSB			

Step 1.

2006	2A0020		LHLD	2000	Load the H-L REG with 1st no. exchange the HL and DE register
2009	EB	XCHG			

Step 2

200A      2A0220      LHLD      2002      Load the H-L  
REG with 2nd no.

Step 3

200D      19      DAD      Add the H-L & D-E  
REG store the result in

200E      220420      SHLD      2004      2004

Step 4

2011      76      HLT      STOP

Example ↴

Address	Data	
2000	CA	LSB1
2001	A7	MSB1
2002	6B	LSB2
2003	B9	MSB2
2004	35	LSB1 + LSB2 (CA + 6B)
2005	61	MSB1 + MSB2 (A7 + B9)

Ans  
16/9/13