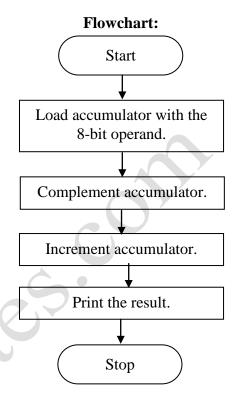
**Program 7:** 2's complement of an 8-bit number.

## **Program:**

Instructions	Comments
include "emu8086.inc"	
ORG 100h	
MOV AL, 05H	Move 8-bit data to AL.
NOT AL	Complement AL.
INC AL	Increment AL.
CALL PRINT_NUM	Print the result.
RET	Return.
DEFINE_PRINT_NUM	Declare function.
END	



## **Explanation:**

- This program finds the 2's complement of an 8-bit number.
- The program has been developed using *emu8086* emulator available at: <u>www.emu8086.com</u>.
- ORG 100h is a compiler directive. It tells compiler how to handle the source code.
- It tells compiler that the executable file will be loaded at the offset of 100h (256 bytes).
- The 8-bit operand 05H is moved to accumulator AL.
- It is complemented by using NOT instruction.
- Then, it is incremented by using INC instruction.
- The result is printed on the screen.

## **Output:**

**Before Execution:** After Execution:

AL = 05H AL = FBH