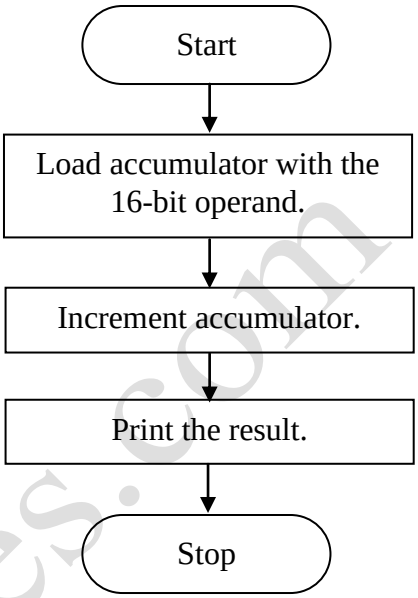
Program 2: Increment a 16-bit number.

Program:

Instructions	Comments
include “emu8086.inc”	
ORG 100h	
MOV AX, 0005H	Move 16-bit data to AX.
INC AX	Increment AX.
CALL PRINT_NUM	Print the result.
RET	Return.
DEFINE_PRINT_NUM	Declare function.
END	

Flowchart:



Explanation:

- This program increments a 16-bit number.
- The program has been developed using ***emu8086*** emulator available at: www.emu8086.com.
- 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 16-bit operand 0005H is moved to accumulator AX.
- Then, it is incremented by using INC instruction.
- The result is printed on the screen.

Output:

Before Execution: AX = 0005H

After Execution: AX = 0006H