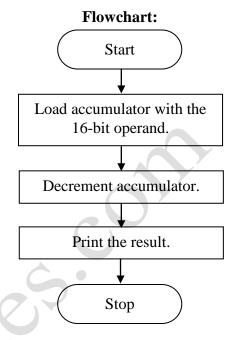
## Program 4: Decrement a 16-bit number.

## **Program:**

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



## **Explanation:**

- This program decrements a 16-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 16-bit operand 0005H is moved to accumulator AX.
- Then, it is decremented by using DEC instruction.
- The result is printed on the screen.

## **Output:**

**Before Execution:** 

**After Execution:** 

AX = 0005H

AX = 0004H