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TD4

■ Ex1 :

Write an 8085 assembly program that loads the value **10** into a memory location, then repeatedly decrements it in a loop until it reaches 0. Determine the total size of the program and the final value of the Program Counter (PC).

■ EX2

Add five consecutive numbers starting from memory address **3000H.**

Store the final result at memory location **3050H.**

Give the final state of the registers after the program ends.

■ Ex3

Write an assembly program that calls a subroutine to calculate the complement of a number and stores the result in a memory location **1010H.**

■ Ex4

Write an 8085 assembly program that reads **10 signed numbers** stored in memory starting from address **0205H**,

counts how many of them are **positive** (sign bit = 0), and stores the result at memory address **0220H**.

■ EX5

Write a program that loads the accumulator with a value 15H and sends it to the output port number 2.

Insert a simple delay **(with NOP)** then a delay subroutine between loading the accumulator and sending its value to port 5.