# Lab 8 – Sample Programs

## Objectives

In this lab, students will execute given sample programs to understand their working and observe their output.

## Lab Tasks

Practice the following code in EMU8086 and write their output:

|  |  |  |
| --- | --- | --- |
|  | **Code** | **Output** |
|  | .MODEL SMALL  .STACK 100H  .CODE  ; input a character  MOV AH, 1 ; read character function  INT 21H ; character in AL |  |
|  | .MODEL SMALL  .STACK 100H  .CODE  ; display character  MOV AH, 2  MOV DL, ‘A’  INT 21H |  |
|  | .MODEL SMALL  .STACK 100H  .DATA  MSG DB "Hello","$"  .CODE  MOV AH, 9  MOV DX, Offset MSG  INT 21H |  |
|  | .MODEL SMALL  .STACK 100H  .DATA  MSG DB "Hello",0AH, "Assembly",0Dh, "LAB""$"  .CODE  MOV AH, 9  MOV DX, Offset MSG  INT 21H |  |
|  | .MODEL SMALL  .STACK 100H  .DATA  MSG DB "Hello",0AH, "Assembly",0Dh, "LAB","$"  .CODE  MOV AH, 2  MOV DL, MSG+2  INT 21H |  |
|  | .MODEL SMALL  .STACK 100H  .DATA  MSG DB "Hello",0AH, "Assembly",0Dh, "LAB","$"  .CODE  MOV AH, 9  LEA DX,MSG  INT 21H |  |

# Lab 9 – Using Basic Instructions: A Programming Exercise I

## Objectives

In this lab, students are assigned a programming exercise related to what they have learned in previous labs.

## Lab Tasks

**Task 1:** Write a program to read a character from user, save the character, display the same character in the start of next line on console.

**Task 2:** Write a program to read a character from user, converting character case (lower to upper or upper to lower), then display the it on next line on console.

**Task 3:** Write a program to display a string stored in the memory.