# Lab Week 8 – Using Logic & Jump Instructions

## Objectives

The objective of this lab is to implement different programs related to logic and jump instructions.

## Lab Tasks

**Task 1:** Write a program to display a “?”, read two capital letters, and display them on the next line in alphabetical order.

**Task 2:** Write a single instruction that clears the high 8 bits of AX and does not change the low 8 bits.

**Task 3:** Write a single instruction that sets the high 8 bits of AX and does not change the low 8 bits.

**Task 4:** Use ROL to count and display the number of 1 bits in BX, without changing BX.

**Task 5:** Write a program to reverse bit pattern of the contents of AL register.