# Lab Week 7 – Conditional and unconditional Jumps

## Objectives

The objective of this lab is to practice an exercise on how to use conditional and unconditional jumps in an assembly language program.

## Lab Tasks

**Task 1:** Write the assembly code for each of the following decision structures:

|  |  |
| --- | --- |
| 1. | IF AX < 0  THEN  PUT -1 IN BX  END\_IF |
| 2. | IF AL < 0  THEN  PUT FFh IN AH  ELSE  PUT 0 IN AH  END\_IF |
| 3. | Suppose DL contains a character which is input by user:  IF (DL >= “A”) AND (DL <= “Z”)  THEN  DISPLAY DL  END\_IF |
| 4. | IF ( AX < BX) OR (BX < CX)  THEN  PUT 0 IN DX  ELSE  PUT 1 IN DX  END\_IF |
| 5. | IF (AX < BX)  THEN  IF ( BX < CX )  THEN  PUT 0 IN AX  ELSE  PUT 0 IN BX  END\_IF  END\_IF |
| 6. | IF (AX < BX)  THEN  PUT O IN AX  ELSE  IF ( BX < CX )  THEN  PUT 0 IN BX  ELSE  PUT 0 IN CX  END\_IF  END\_IF |

**Task 2:** Use a case structure to code the following:

1. Read a character
2. If it’s “A”, then execute carriage return and display string Carriage Return.
3. If it’s “B”, then execute line feed and display string Line Feed.
4. If any other character, then return to dos.