# Lecture two

## LOGICAL Instructions

> AND

> TEST

> OR

> CMP

> XOR

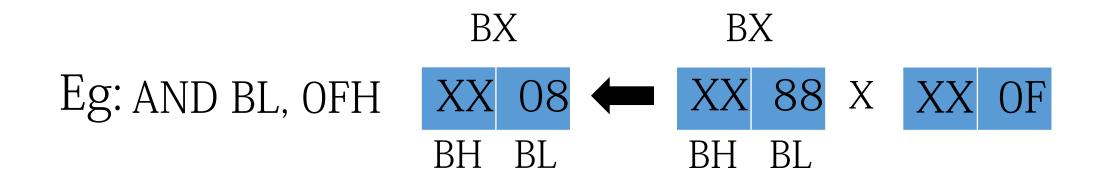
> JNZ

> NOT

> JZ

## AND

## AND Destination, Source



## OR

### OR Destination, Source

AX AX
Eg: MOV AX, 2000h
OR AX, 0008h
AH AL AH AL

## XOR

## XOR Destination, Source

## NOT

#### NOT Source

Eg: MOV AX, 2000h

NOT AX

AX

AX

AX

AX

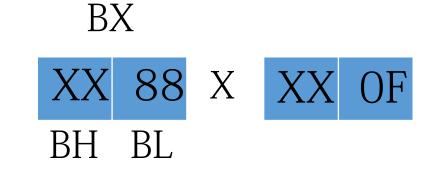
AH AL

AH AL

## TEST

### TEST Destination, Source

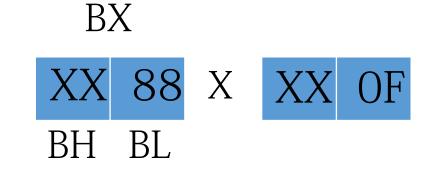
Eg: TEST BL, OFH



## **CMP**

## CMP Destination, Source

Eg: CMP BL, OFH



## JNZ

### JNZ label

Short Jump if Not Zero (not equal). Set by CMP, SUB, ADD, TEST, AND, OR, XOR instructions.

if ZF = 0 then jump

### JZ label

Short Jump if Zero (equal). Set by CMP, SUB, ADD, TEST, AND, OR, XOR instructions.

if ZF = 1 then jump