

Microcontroller Lab Report

8086 programming Part 1

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1 Question X

1.1 Aim

1.2 Program

1.2.1 Code

```
MOV AX, 2100H  
MOV BX, 2000H  
ADD AX, BX  
MOV [2000H], AX  
HLT
```

1.2.2 Emulator

Address (CS:0100, IP:0000)	Machine code	Instruction
01000	B8,00,21	MOV AX, 02100H

1.3 Result

1.3.1 Input

AX: 2100H

BX: 2800H

1.3.2 Expectation

$AX \leftarrow AX + BX;$

$2100H + 2800H \rightarrow 4900H \rightarrow AX$

1.3.3 Emulator

Figure 1: Emulator Output