



# **Ahsanullah University of Science & Technology**

## **Department of Computer Science & Engineering**

**Course No** : CSE3108  
**Course Title** : Microprocessors Sessional  
**Assignment No** : 02

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**Section** : A

$Y(ON) - G_2(ON) - G_2(OFF) - R_1 + R_2(ON)$

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DS EG      SEGMENT 'DATA'

DS EG      ENDS

SS EG      SEGMENT STACK 'STACK'

DW      100h      DUP(?)

SS EG      ENDS

CS EG      SEGMENT 'CODE'

START      PROC FAR

; store return address to OS:

PUSH DS

MOV AX, 0

PUSH AX

; set segment registers:

MOV AX, DSEG

MOV DS, AX

MOV ES, AX

MOV DX, 2070h

MOV BX, 2070h

MAINLOOP:

STEP\_1: ; Y ON

MOV AL, 0010b

OUT DX, AL

MOV CX, 0200H

L0: LOOP L0

STEP\_2: ; G ON

MOV AL, 0110b

OUT DX, AL

MOV CX, 0200H

L1: LOOP L1

STEP\_3: ; G OFF

MOV AL, 0010b

OUT DX, AL

MOV CX, 0200H

L2: LOOP L2

STEP\_4

; R1+R2 ON

MOV AL, 1011b

OUT DX, AL

MOV CX, 0200H

L3: LOOP L3

; return to OS;

RET

START

ENDP

CS:02

ENDS

END

START

— 0 —