



Ahsanullah University of Science and Technology (AUST)
Department of Computer Science and Engineering

LAB REPORT

Course No : CSE3108
Course Title : Microprocessors Sessional
Assignment No : 02
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Section : B

Q. Show the desired output in LED Display:

G(ON) - R2(ON) - Y(ON) - R2 + Y(OFF)

Answer:

```
SSEG SEGMENT STACK 'STACK'
```

```
    DW 50 DUP(?)
```

```
SSEG ENDS
```

```
DSEG SEGMENT 'DATA'
```

```
LEDs DB 00000100b, 00001100b, 00001110b, 00000100b
```

```
DSEG ENDS
```

```
CSEG SEGMENT 'CODE'
```

```
MAIN PROC FAR
```

```
    PUSH DS
```

```
    MOV AX, 0
```

```
    PUSH AX
```

```
    MOV AX, DSEG
```

```
    MOV DS, AX
```

```
    MOV ES, AX
```

```
    MOV DX, 2070h
```

```
    XOR SI, SI
```

```
    MOV BX, 4
```


NEXT :

MOV AL, LEDs[SI]

OUT DX, AL

; for delay

MOV CX, 01FFH

LO:

LOOP LO

INC SI

DEC BX

CMP BX, 0

JG NEXT

RET

MAIN ENDP

CSEG ENDS

END MAIN