Ahsanullah University of Science & Technology

Department of Computer Science & Engineering

Course No   : CSE3108
Course Title   : Microprocessors Sessional
Assignment No   : Bonus Assignment

Date of Submission   :03-10-2021

Submitted To   : Ms. Qamrun Nahar Eity & Ms. Tahsin Aziz

Submitted By-
Group   : A₂
Name   : Minhajul Islam Jim
Id   : 17.01.04.001
Section   : A

```
DSEG    SEGMENT 'DATA'
DSEG    ENDS
SSEG    SEGMENT STACK 'STACK'
        DW    100h    DUP(?)
SSEG    ENDS

CSEG    SEGMENT 'CODE'

START   PROC   FAR

        PUSH    DS
        MOV     AX,0
        PUSH    AX

        MOV     AX, DSEG

        MOV     DS, AX

        MOV     ES, AX

; NAME: MINHAJ
; ID:  001

; M

MOV   DX, 2000H
MOV   AL, 040H
OUT   DX, AL

MOV   DX, 2030H

MOV   AL, 00000001b

OUT   DX, AL

MOV   CX, 20H
```

```
MOV DX, 2000 H
MOVB AL, 060H
OUT   DX, AL

MOV Dx, 2000H
MOV AL, 070H
OUT   DX, AL

MOV  DX, 2000H
MOV AL, 078H
OUT   DX, AL

MOV  DX, 2000H
MOV   AL, 07CH
OUT   DX, AL

MOV  DX, 2000H
MOV   AL, 07EH
OUT   DX, AL

MOV  Dx, 2000H
MOV   AL, 07FH
OUT   DX, AL

MOV   DX, 2030H
MOV   AL, 00000011 b
OUT   DX, AL

MOV   CX, 70H
MOV   DX, 2001H
MOV   AL, 02H
OUT   DX, AL
```

②

```
MOV    DX, 2002H
MOV    AL, 04H
OUT    DX, AL
MOV    DX, 2030H
MOV    AL, 00000111b
OUT    DX, AL
MOV    CX, 2004
MOV    DX, 2003H
MOV    AL, 02H
OUT    DX, AL

MOV    DX, 2004H
MOV    AL, 01H
OUT    DX, AL
MOV    DX, 2030H
MOV    AL, 0000 1111b
OUT    DX, AL
MOV    CX, 2014.

MOV    DX, 2004H
MOV    AL, 03H
OUT    DX, AL
MOV    DX, 2004H
MOV    AL, 07H
OUT    DX2, AL
MOV    DX, 2030H
MOV    AL, 0001 1111b
```

③

```
MOV    DX, 2004 H
MOV    AL  OF H
OUT    DX, AL

MOV    DX, 2030 H

MOV    AL, 00111111 b

OUT    DX, AL

MOV    CX, 2004

MOV    DX, 2006 H
MOV    AL, 01 H
OUT    DX, AL

MOV    DX, 2007 H
MOV    AL, 01 H
OUT    DX, AL

MOV    DX, 2031 H
MOV    AL, 00000001 b
OUT    DX, AL
MOV    CX, 20H

MOV    DX, 2008 H

MOV    AL, 01 H

OUT    DX, AL

MOV    DX, 2031 H

MOV    AL, 00000011 b

OUT    DX, AL
MOV    CX, 20H
```

```
MOV   DX , 2007 H
MOV   AL,  0FH
OUT   DX, AL
MOV   DX, 2031
MOV   AL,  00000111 b
OUT   DX, AL
MOV   CX, 20 H

MOV   DX,  2007 H
MOV   AL,   07 H
OUT   DX, AL
MOV   DX,  2008 H
MOV   AL,  041 H
OUT   DX,  AL
MOV   DX , 2031 H
MOV   AL,  00111111 b
OUT   DX, AL
MOV   CX, 20 H .

MOV   DX ,  200A H
MOV   AL,  01 H
OUT   DX,  AL
MOV   DX , 200A H
MOV   AL ,  03 H
OUT   DX, AL
```

```
mov  DX,  200AH
mov  AL ,  07FH
OUT  DX,  AL

mov  DX ,  2032H
mov  AL ,  00000001H

OUT  DX ,  AL
MOV  CX, 20H .

MOV      DX, 200BH
MOV      AL,  04H
OUT      DX , AL
mov      DX ,  200CH

mov      AL,   08H
OUT      DX,   AL
MON      DX ,  200DH
MOV      AL , 010H
OUT      DX,  AL
mov      DX , 200EH

mov      AL , 01H.
OUT      DX  AL

MOV      DX, 200EH
MOV      AL,  07FH

OUT      DX,  AL          ⑥
```

```
MOV     DX , 2032 H
MOV     AL , 00000110 b
OUT     DX , AL
MOV     CX , 20 H .


MOV     DX , 200 F H
MOV     AL , 07 FH
OUT     DX , AL

MOV     DX , 2013 H
MOV     AL , 01 H
OUT     DX , AL

MOV     DX , 2013
MOV     AL , 07 FH
OUT     DX , AL

MOV     DX , 2010 H
MOV     AL , 08 H
OUT     DX , AL

MOV     DX , 2011 H
MOV     AL 08 H
OUT     DX , AL

MOV     DX , 2012 H
MOV     AL , 08 H
OUT     DX , AL
```

⑦

```
MOV    DX, 2014H
MOV    AL, 07EH
OUT    DX, AL

MOV    DX, 2015
MOV    AL, 01H
OUT    DX, AL

MOV    DX, 2016
MOV    AL, 01H
OUT    DX, AL

MOV    DX, 2017
MOV    AL, 01H
OUT    DX, AL

MOV    DX, 2018
MOV    AL, 02H
OUT    DX, AL

MOV    DX, 2018
MOV    AL, 07EH
OUT    DX, AL

MOV    DX, 2015
MOV    AL, 09H
OUT    DX, AL

MOV    DX, 2016
MOV    AL, 09H
OUT    DX, AL
```

⑧

```
MOV   DX , 2017 H
MOV   AL, 09H
OUT   DX , AL

MOV   DX, 201A H
MOV   AL , 01H
OUT   DX , AL

MOV   DX , 201B H

MOV   AL   01H
OUT   DX , AL

MOV   DX , 201C H

MOV   AL , 01H

OUT   DX , AL

MOV   DX , 201D 201D H

MOV   AL , 01 H

OUT   DX , AL .

MOV   DX , 201 D H

MOV   AL , 07EH 07F H

OUT   DX , AL

MOV   DX , 201 CH
MOV   AL , 041 H
OUT   DX , AL
```

```
MOV    DX, 201 BH
MOV    AL, 041 H
OUT    DX, AL

MOV    DX, 201 AH

MOV    AL, 021 H

OUT    DX, AL

MOV    DX, 201 AH

MOV    AL, 031 H

OUT    DX, AL


RET

START  ENDP

DELAY:

       MOV AX, 0

       LOOP 1:

       INC AX

       CMP AX, 1

       JNE LOOP1

       RET

CSEG   ENDS
       END    START.
                ─ o ─
```

⑩ .