1.)

a)

AX=0000 BX=0000 CX=0000 DX=0000 SP=FFEE BP=0000 SI=0000 DI=0000

DS=13FA ES=13FA SS=13FA CS=13FA IP=0100 NV UP EI PL NZ NA PO NC

13FA:0100 0000 ADD [BX+SI],AL DS:0000=CD

b)

-r ip

IP 0100

:

c)

-r ds

DS 13FA

:1800

d)

-r cs

CS 13FA

:2400

e)

-r f

NV UP EI PL NZ NA PO NC -pl

-r f

NV UP EI PL NZ NA PO NC -ov

-r f

OV UP EI PL NZ NA PO NC -

f)

-r

AX=0000 BX=0000 CX=0000 DX=0000 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=0100 OV UP EI PL NZ NA PO NC

2400:0100 0000 ADD [BX+SI],AL DS:0000=00

2.)

-f 20 3d 42

3.)

-d 20 3d

1800:0020 42 42 42 42 42 42 42 42-42 42 42 42 42 42 42 42 BBBBBBBBBBBBBBBB

1800:0030 42 42 42 42 42 42 42 42-42 42 42 42 42 42 BBBBBBBBBBBBBB

4.)

-m ds:20 33 cs:100

-d cs:100 133

2400:0100 42 42 42 42 42 42 42 42-42 42 42 42 42 42 42 42 BBBBBBBBBBBBBBBB

2400:0110 42 42 42 42 00 00 00 00-00 00 00 00 00 00 00 00 BBBB............

2400:0120 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00 ................

2400:0130 00 00 00 00 ....

-d ds:20 33

1800:0020 42 42 42 42 42 42 42 42-42 42 42 42 42 42 42 42 BBBBBBBBBBBBBBBB

1800:0030 42 42 42 42 BBBB

5.)

a)

-c ds:20 33 cs:100

b)

-c ds:20 47 cs:100

1800:0034 42 00 2400:0114

1800:0035 42 00 2400:0115

1800:0036 42 00 2400:0116

1800:0037 42 00 2400:0117

1800:0038 42 00 2400:0118

1800:0039 42 00 2400:0119

1800:003A 42 00 2400:011A

1800:003B 42 00 2400:011B

1800:003C 42 00 2400:011C

1800:003D 42 00 2400:011D

6.)

-s ds:00 30 42

1800:0020

1800:0021

1800:0022

1800:0023

1800:0024

1800:0025

1800:0026

1800:0027

1800:0028

1800:0029

1800:002A

1800:002B

1800:002C

1800:002D

1800:002E

1800:002F

1800:0030

7.)

-a 100

2400:0100 mov ax,55

2400:0103 mov bx,ax

2400:0105 mov cx,20

2400:0108 mov dx,0110

2400:010B or cx,ax

2400:010D or ax,cx

2400:010F add bx,ax

2400:0111 sub ax,bx

2400:0113 rol dx,1

2400:0115 ror dx,1

2400:0117 ror dx,1

2400:0119 not dx

2400:011B

-u 100

2400:0100 B85500 MOV AX,0055

2400:0103 89C3 MOV BX,AX

2400:0105 B92000 MOV CX,0020

2400:0108 BA1001 MOV DX,0110

2400:010B 09C1 OR CX,AX

2400:010D 09C8 OR AX,CX

2400:010F 01C3 ADD BX,AX

2400:0111 29D8 SUB AX,BX

2400:0113 D1C2 ROL DX,1

2400:0115 D1CA ROR DX,1

2400:0117 D1CA ROR DX,1

2400:0119 F7D2 NOT DX

2400:011B 0000 ADD [BX+SI],AL

2400:011D 0000 ADD [BX+SI],AL

2400:011F 0000 ADD [BX+SI],AL

8.)

-r ip

IP 0100

:100

-t 3

AX=0055 BX=0000 CX=0000 DX=0000 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=0103 OV UP EI PL NZ NA PO NC

2400:0103 89C3 MOV BX,AX

AX=0055 BX=0055 CX=0000 DX=0000 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=0105 OV UP EI PL NZ NA PO NC

2400:0105 B92000 MOV CX,0020

AX=0055 BX=0055 CX=0020 DX=0000 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=0108 OV UP EI PL NZ NA PO NC

2400:0108 BA1001 MOV DX,0110

-t 3

AX=0055 BX=0055 CX=0020 DX=0110 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=010B OV UP EI PL NZ NA PO NC

2400:010B 09C1 OR CX,AX

AX=0055 BX=0055 CX=0075 DX=0110 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=010D NV UP EI PL NZ NA PO NC

2400:010D 09C8 OR AX,CX

AX=0075 BX=0055 CX=0075 DX=0110 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=010F NV UP EI PL NZ NA PO NC

2400:010F 01C3 ADD BX,AX

-t 3

AX=0075 BX=00CA CX=0075 DX=0110 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=0111 NV UP EI PL NZ NA PE NC

2400:0111 29D8 SUB AX,BX

AX=FFAB BX=00CA CX=0075 DX=0110 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=0113 NV UP EI NG NZ AC PO CY

2400:0113 D1C2 ROL DX,1

AX=FFAB BX=00CA CX=0075 DX=0220 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=0115 NV UP EI NG NZ AC PO NC

2400:0115 D1CA ROR DX,1

-t 3

AX=FFAB BX=00CA CX=0075 DX=0110 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=0117 NV UP EI NG NZ AC PO NC

2400:0117 D1CA ROR DX,1

AX=FFAB BX=00CA CX=0075 DX=0088 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=0119 NV UP EI NG NZ AC PO NC

2400:0119 F7D2 NOT DX

AX=FFAB BX=00CA CX=0075 DX=FF77 SP=FFEE BP=0000 SI=0000 DI=0000

DS=1800 ES=13FA SS=13FA CS=2400 IP=011B NV UP EI NG NZ AC PO NC

2400:011B 0000 ADD [BX+SI],AL DS:00CA=00