

Code:

3 Trainer

File Edit Commands I/O Window Help



Assemble

Address: 2000

Assemble

Address	Code	Mnemonics
0000:2000	BE 20 20	MOV SI,2020
0000:2003	B9 05 00	MOV CX,05
0000:2006	03 04	ADD AX,[SI]
0000:2008	46	INC SI
0000:2009	46	INC SI
0000:200A	E2 FA	LOOP 2006
0000:200C	B9 05 00	MOV CX,05
0000:200F	F7 F1	DIV CX
0000:2011	BE 30 20	MOV SI,2030
0000:2014	89 04	MOV [SI],AX
0000:2016	CC	INT 03
0000:2017	ORG 2020	ORG 2020
0000:2020	DW 2000	DW 2000
0000:2022	DW 2000	DW 2000
0000:2024	DW 4000	DW 4000
0000:2026	DW 6000	DW 6000
0000:2028	DW 8000	DW 8000
0000:202A		

occupied:

Address: 2000

Assemble

Address	Code	Mnemonics
0000:2000	BB 00 00	MOV AX,0000
0000:2003	8E DB	MOV DS,AX
0000:2005	B3 0A	MOV BL,0A
0000:2007	8A CB	MOV CL,BL
0000:2009	BE 00 21	MOV SI,2100
0000:200C	BF 00 31	MOV DI,3100
0000:200F	8A 04	MOV AL,[SI]
0000:2011	46	INC SI
0000:2012	FE C9	DEC CL
0000:2014	74 0C	JZ 2022
0000:2016	3A 04	CMP AL,[SI]
0000:2018	76 F7	JNA 2011
0000:201A	8A E0	MOV AH,AL
0000:201C	8A 04	MOV AL,[SI]
0000:201E	88 24	MOV [SI],AH
0000:2020	EB EF	JMP 2011
0000:2022	88 05	MOV [DI],AL
0000:2024	47	INC DI
0000:2025	8B F7	MOV SI,DI
0000:2027	81 EE 00 10	SUB SI,1000
0000:202B	FE CB	DEC BL
0000:202D	74 04	JZ 2033
0000:202F	8A CB	MOV CL,BL
0000:2031	EB DC	JMP 200F
0000:2033	CC	INT 03
0000:2034	ORG 2100	ORG 2100
0000:2100	DB 05	DB 05
0000:2101	DB 01	DB 01
0000:2102	DB 08	DB 08
0000:2103	DB 02	DB 02
0000:2104	DB 09	DB 09
0000:2105	DB 04	DB 04
0000:2106	DB 05	DB 05
0000:2107	DB 00	DB 00
0000:2108	DB 07	DB 07
0000:2109	DB 03	DB 03

Address	Code	Mnemonics
0000:6000	DLY EQU 6030	DLY EQU 6030
0000:6000	ORG 6000	ORG 6000
0000:6000	BA D6 FF	MOV DX,0FFD6
0000:6003	B0 80	MOV AL,80
0000:6005	EE	OUT DX,AL
0000:6006	B9 FF 00	AGN:MOV CX,0FF
0000:6009	B8 00 00	MOV AX,0000
0000:600C	BA D0 FF	UP:MOV DX,0FFD0
0000:600F	EE	OUT DX,AL
0000:6010	FE C0	INC AL
0000:6012	E8 1B 00	CALL DLY
0000:6015	E2 F5	LOOP UP
0000:6017	B9 FF 00	MOV CX,0FF
0000:601A	BA D0 FF	N:MOV DX,0FFD0
0000:601D	EE	OUT DX,AL
0000:601E	FE C8	DEC AL
0000:6020	E8 0D 00	CALL DLY
0000:6023	E2 F5	LOOP N
0000:6025	EB DF	JMP AGN
0000:6027	ORG DLY	ORG DLY
0000:6030	90	NOP
0000:6031	90	NOP
0000:6032	90	NOP
0000:6033	C3	RET
0000:6034	CC	INT 03
0000:6035		

Code for Right Rotate:

100 Assemble

Address: 2000

[illegible]

Address: 2000

Assemble

Address	Code	Mnemonics
0000:2000	BA E6 FF	MOV DX,OFFE6
0000:2003	B0 80	MOV AL,80
0000:2005	EE	OUT DX,AL
0000:2006	BA E0 FF	MOV DX,OFFE0
0000:2009	B0 09	MOV AL,09
0000:200B	EE	OUT DX,AL
0000:200C	BB FF FF	MOV BX,OFFFF
0000:200F	90	NOP
0000:2010	4B	DEC BX
0000:2011	75 FC	JNZ 200F
0000:2013	FE C8	DEC AL
0000:2015	75 F4	JNZ 200B
0000:2017	EB F0	JMP 2009
0000:2019	CC	INT 03
0000:201A		

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Address: 2000

Assemble

Address	Code	Mnemonics
0000:2000	BA E6 FF	MOV DX,0FFE6
0000:2003	B8 80 00	MOV AX,80
0000:2006	EF	OUT DX,AX
0000:2007	B8 00 00	START: MOV AX,0000
0000:200A	BA E0 FF	MOV DX,0FFE0
0000:200D	EF	OUT DX,AX
0000:200E	BA E2 FF	MOV DX,0FFE2
0000:2011	EF	OUT DX,AX
0000:2012	FE C0	INC AL
0000:2014	B3 08	MOV BL,08
0000:2016	BA E0 FF	LOOP: MOV DX,0FFE0
0000:2019	EF	OUT DX,AX
0000:201A	50	PUSH AX
0000:201B	E8 1E 00	CALL 203C
0000:201E	58	POP AX
0000:201F	B1 01	MOV CL,01
0000:2021	D2 C0	ROL AL,CL
0000:2023	FE CB	DEC BL
0000:2025	75 EF	JNE 2016
0000:2027	B3 08	MOV BL,08
0000:2029	BA E2 FF	LOOP2: MOV DX,0FFE2
0000:202C	EF	OUT DX,AX
0000:202D	50	PUSH AX
0000:202E	E8 08 00	CALL 203C
0000:2031	58	POP AX
0000:2032	B1 01	MOV CL,01
0000:2034	D2 C0	ROL AL,CL
0000:2036	FE CB	DEC BL
0000:2038	75 EF	JNE 2029
0000:203A	EB CB	JMP 2007
0000:203C	51	PUSH CX
0000:203D	B9 FF FF	MOV CX,0FFFF
0000:2040	E2 FE	REPEAT: LOOP REPEAT
0000:2042	59	POP CX
0000:2043	C3	RET
0000:2044	CC	INT 03
0000:2045		

code:

8.2.3 Assembly

Address: 6000

[illegible]

Output:

Address	Code	Mnemonics
0000:2000	B8 00 00	MOV AX,0000
0000:2003	8E D8	MOV DS,AX
0000:2005	BE 00 21	MOV SI,2100
0000:2008	B7 0A	MOV BH,0A
0000:200A	8A 04	MOV AL,[SI]
0000:200C	46	NXT: INC SI
0000:200D	FE CF	DEC BH
0000:200F	74 0A	JZ 2018
0000:2011	8A 1C	MOV BL,[SI]
0000:2013	3A C3	CMP AL,BL
0000:2015	77 F5	JNBE NXT
0000:2017	8A C3	MOV AL,BL
0000:2019	EB F1	JMP NXT
0000:2018	CC	OVR : INT 03
0000:201C	ORG 2100	ORG 2100
0000:2100	DB 2	DB 2
0000:2101	DB 3	DB 3
0000:2102	DB 4	DB 4
0000:2103	DB 5	DB 5
0000:2104	DB 6	DB 6
0000:2105	DB 7	DB 7
0000:2106	DB 8	DB 8
0000:2107	DB 9	DB 9
0000:2108	DB 0	DB 0
0000:2109	DB 1	DB 1