

Sınav Bilgisi	EEM-364 Mikro İşlemciler Vizesi B. Grubu (Numara Sonu Çift İse)			18/04/23 11:30	1	2	3	4	5	6	7	8	9	10	11
Öğrenci İsmi				Numarası											
				Soru Puanlama	S1	S2	S3	S4	S5	S6					
Breakout ODA No		Toplam Kâğıt													
İmza				Süre 80 dk	Kopya çektiğinden şüphelenilen ya da kurallara uymayan öğrenci hakkında tutanak tutulacaktır, sınavının geçersiz sayılıp sayılmamasına ve/veya örgün sınava alınıp alınmamasına kurul karar verecektir. <u>Bilginizin değerini usulsüz paylaşımlarla düşürmeyiniz.</u> SÜRE UZATIMI OLMAYACAKTIR										

(DOĞRU GRUP (A ve B) SEÇİM YAPILMAYAN SINAV KAĞIDINDAN 20 PUAN KIRILACAKTIR)

S1A (P.10))

S1B (P.15))

Numara:	İsim Soyisim:	İmza:
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S2) Soruları segment yazma tablosuna gre cevaplayınız. (P.10)

HEX Sayılar					
A	B	C	D	E	F
10	11	12	13	14	15

Bit Deęerleri			
8	4	2	1

CS	DS	SS	ES
IP	DX , DI , SI	BP , SP	BX , DI , SI

CS	DS	SS	ES
0123 H H H	4502 H

A:

B:

Numara:	İsim Soyisim:	İmza:
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S3) Verilen kod parçalarının makine kodlarını oluřturunuz (P.3x6 + 7= 25).

<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="3">REG or R/M when MOD=11</th> </tr> <tr> <th>REG R/M</th> <th>W=0</th> <th>W=1</th> </tr> <tr><td>000</td><td>AL</td><td>AX</td></tr> <tr><td>001</td><td>CL</td><td>CX</td></tr> <tr><td>010</td><td>DL</td><td>DX</td></tr> <tr><td>011</td><td>BL</td><td>BX</td></tr> <tr><td>100</td><td>AH</td><td>SP</td></tr> <tr><td>101</td><td>CH</td><td>BP</td></tr> <tr><td>110</td><td>DH</td><td>SI</td></tr> <tr><td>111</td><td>BH</td><td>DI</td></tr> </table>	REG or R/M when MOD=11			REG R/M	W=0	W=1	000	AL	AX	001	CL	CX	010	DL	DX	011	BL	BX	100	AH	SP	101	CH	BP	110	DH	SI	111	BH	DI	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>R/M</th> <th>MOD=00</th> <th>MOD=01</th> <th>MOD=10</th> </tr> <tr><td>000</td><td>BX+SI</td><td>BX+SI+D8</td><td>BX+SI+D16</td></tr> <tr><td>001</td><td>BX+DI</td><td>BX+DI+D8</td><td>BX+DI+D16</td></tr> <tr><td>010</td><td>BP+SI</td><td>BP+SI+D8</td><td>BP+SI+D16</td></tr> <tr><td>011</td><td>BP+DI</td><td>BP+DI+D8</td><td>BP+DI+D16</td></tr> <tr><td>100</td><td>SI</td><td>SI+D8</td><td>SI+D16</td></tr> <tr><td>101</td><td>DI</td><td>DI+D8</td><td>DI+D16</td></tr> <tr><td>110</td><td><i>direct</i></td><td>BP+D8</td><td>BP+D16</td></tr> <tr><td>111</td><td>BX</td><td>BX+D8</td><td>BX+D16</td></tr> </table>	R/M	MOD=00	MOD=01	MOD=10	000	BX+SI	BX+SI+D8	BX+SI+D16	001	BX+DI	BX+DI+D8	BX+DI+D16	010	BP+SI	BP+SI+D8	BP+SI+D16	011	BP+DI	BP+DI+D8	BP+DI+D16	100	SI	SI+D8	SI+D16	101	DI	DI+D8	DI+D16	110	<i>direct</i>	BP+D8	BP+D16	111	BX	BX+D8	BX+D16	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Opcode</th> <th>D</th> <th>W</th> <th>MOD</th> <th>Reg</th> <th>R/M</th> </tr> <tr><td colspan="6" style="height: 100px;"> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Komut</th> <th>Opcode</th> </tr> <tr><td>MOV</td><td>10 00 10</td></tr> <tr><td>SUB</td><td>00 11 00</td></tr> <tr><td>MUL</td><td>01 01 01</td></tr> <tr><td>DIV</td><td>10 10 10</td></tr> <tr><td>ADD</td><td>00 00 00</td></tr> </table> </td></tr> </table>	Opcode	D	W	MOD	Reg	R/M	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Komut</th> <th>Opcode</th> </tr> <tr><td>MOV</td><td>10 00 10</td></tr> <tr><td>SUB</td><td>00 11 00</td></tr> <tr><td>MUL</td><td>01 01 01</td></tr> <tr><td>DIV</td><td>10 10 10</td></tr> <tr><td>ADD</td><td>00 00 00</td></tr> </table>						Komut	Opcode	MOV	10 00 10	SUB	00 11 00	MUL	01 01 01	DIV	10 10 10	ADD	00 00 00
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HEX Sayılar						Bit Değerleri			
A	B	C	D	E	F	8	4	2	1
10	11	12	13	14	15				

KOD PARÇASI	Makine Kodu	CS İçi																																
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Numara:	İsim Soyisim:	İmza:
Nt, Ns ve Ni Sayılarının Türetimi: Numaranızın son 4 hanesini 1597 sayısı ile 10'luk sisteme göre toplayınız. Eğer taşma olursa 5 haneli sayının son 4 hanesini alınız. Hex olarak Ns ve Ni olarak ayırınız.		
Örn_1: Numara son 4 hane : 9796 Toplam: 11393 Kullanılacak Sayı : 1393 Ns: 13 H Ni: 93 H Nt: 1393 H Örn_2: Numara son 4 hane : 3021 Toplam: 4618 Kullanılacak Sayı : 4618 Ns: 46 H Ni: 18 H Nt: 4618 H		
Ns:	Ni:	Nt:

S4. (P.40)) Aşağıda verilen kod parçasının adresleme türlerini bulunuz **(P.10)** Açıklamaları yazınız **(P.10)** Kodu çalıştırınız **(P.20)**

S.Reg.					Data Segment (1453)					Stack Segment				
CS	1234 H				Adres	Değer				Adres	Değer			
DS	1453 H				0000	0A H				0000	03 H			
SS	1A2F H				0001	09 H				0001	12 H			
ES	4000 H				0002	08 H				0002	25 H			
I.Reg.					0003	07 H				0003	4F H			
DI	0001 H				0004	06 H				0004	06 H			
SI	0002 H				0005	05 H				0005	02 H			
P.Reg.					0006	04 H				0006	00 H			
SP	Nt				0007	03 H				0007	FF H			
BP	0004 H				Data Segment (5314)									
GPR					Adres	Değer				Adresleme Modları				
AL	Ni				0000	03 H				1	Hemen	ADRESLEME		
AH	Ns				0001	04 H				2	Doğrudan			
BL	00 H				0002	05 H				3	Yazmaç			
BH	0F H				0003	06 H				4	Yazmaç Dolaylı			
CL	A2 H				0004	07 H				5	Taban Mod			
CH	0A H				0005	08 H				6	İndeks Mod			
DL	32 H				0006	09 H				7	Taban+İndeks Mod			
DH	05 H				0007	0A H								

SIRA	KOMUT	OPERAND		Adr. Mod	AÇIKLAMA
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					