```
4) a) copies entents of BX to AX (16 bit trocklips the (mont)
    b) " 3AH into CH register (9 bit " (hotel)
    c) " contents of AX into the address
                                    4 ( DS x 10H + 4815 H)
    d) rapies CL into memory address - ( bs x lat + &x).
    e) calismas. Segment to segment is not allowed.
   f) mixed size copying is not allowed. (8 bit us 14 bit)
   9) (ode segment connot be the destination
2) AH, AL, BH, BL, CH, CL, BH, BL - 8 bit. registers.
   AX, BX, DX, CK, SP, BP, SI, DI - 16 bit registers.
3) a) MOV AL, 124
  6) MOV AX CX
  c) MOV BL, 100 or MOV BL, 64H.
  d) MOV AX, [ax]
  el PUSH AX
  f) (sorunas sorunda AX var / pop AX
  AHZUG 10
4) a)
                     M + 11214 = 12000 + 1234 + 2324 H.
                   DZXIOH+ BX = SOOOH+ 0300 H = 5300H.
         EAX.
    6)
                     . HOOUS (= IO+ HOX 20
    ()
               HCO25 (= HCOI+ Id + HOI x 2d
    9)
           AX
                     1 77 × 100 + 4000 + 5 1000 + 300 H = 34/00
    c)
               DX BX SP BP
    AX
              pushA atma stast
```

- 5) 0x1900 = 1900 H r

  Stataki calistralock instructions belong icin;

  CS x 10H + IP = 19000H + 1740H = 1A740H
- 6) (2 torafto memors) Hemory to memors move is not allowed.
- 7) Direct, Relative, Indirect.

20 FEH - BL.

- (c) code segment (cs) defiskilife isin vermen
- Default DF=0.

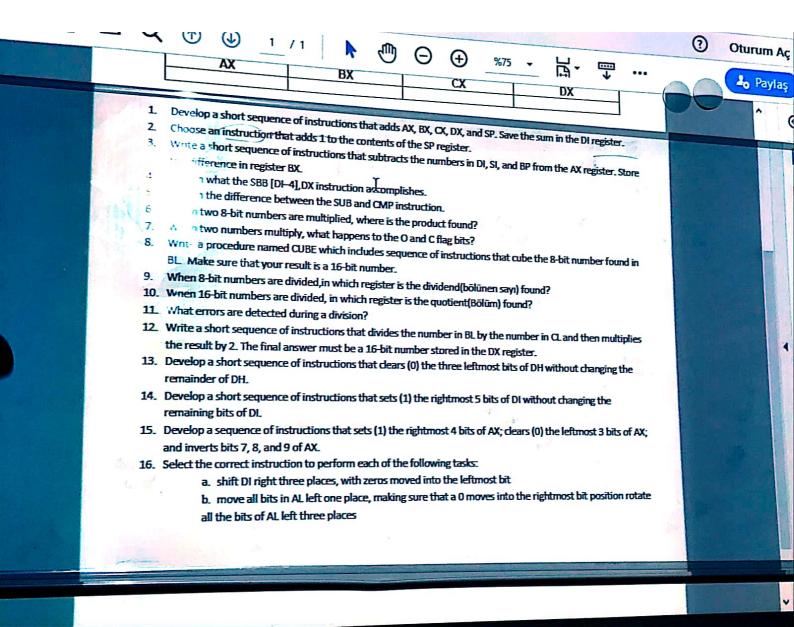
  (Push islenderi 16 bit yapılır.)

  2100 H Dolu.

  SP 2 (SP iki ozolocok)
  - OIOOH

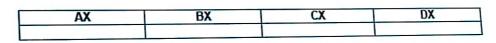
    SOOFEH (SP Nin on borum).

10) 2.



Write down the contents of registers when following instructions executed. Assume that contents of AX, BX, CX and DX are 0000H initially. Also address of data1 and data2 are 0000H and 0002H respectively.

data1 DW 1234H data2 DW 5678H mov si, 514ah mov [si], 6583h lodsb lea di, data2 lea bx,[di] mov cx,[di] mov dx,[0000H]



- Develop a short sequence of instructions that adds AX, BX, CX, DX, and SP. Save the sum in the DI register.
- Choose an instruction that adds 1 to the contents of the SP register.
- Write a short sequence of instructions that subtracts the numbers in DI, SI, and BP from the AX register. Store the difference in register BX.
- Explain what the SBB [DI-4],DX instruction accomplishes.
- Explain the difference between the SUB and CMP instruction.
- When two 8-bit numbers are multiplied, where is the product found?
- 7. When two numbers multiply, what happens to the O and C flag bits?
- Write a procedure named CUBE which includes sequence of instructions that cube the 8-bit number found in
  - BL Make sure that your result is a 16-bit number.
- When 8-bit numbers are divided, in which register is the dividend(bölünen sayı) found? 10. When 16-bit numbers are divided, in which register is the quotient(Bōlūm) found?

- at the trustions that divides the number in RI by the number in CI and then multiplies 11. What errors are detected during a division?

the result by 2. The final answer must be a 16-bit number stored in the DX register.

13. Develop a short sequence of instructions that clears (0) the three leftmost bits of DH without changing the

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