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| ***תרגיל 1*** | **AL** | | **BX** | | **SI** | **ZF** | **CF** |  |  |
|  | **AH** | **AL** | **BH** | **BL** |  |  |  | **Address** | **Memory** |
| MOV SI, 1000H |  |  |  |  | 1000H |  |  | 1000H | 25H |
| MOV AH, [SI] | 25H |  |  |  |  |  |  | 1001H | 25H |
| INC SI |  |  |  |  | 1001H | 0 |  | 1002H | 0H |
| MOV AL, [SI] |  | 25H |  |  |  |  |  |  |  |
| MOV BL, 69H |  |  |  | 69H |  |  |  |  |  |
| INC SI |  |  |  |  | 1002H | 0 |  |  |  |
| ADD AL, AH |  | 4A |  |  |  | 0 | 0 |  |  |
| SUB AL, BL |  | E1H |  |  |  | 0 | 1 |  |  |
| JC SMALL |  |  |  |  |  |  |  |  |  |
| MOV [SI], 255 |  |  |  |  |  |  |  |  |  |
| JMP SOF |  |  |  |  |  |  |  |  |  |
| SMALL: |  |  |  |  |  |  |  |  |  |
| MOV [SI], 0H |  |  |  |  |  |  |  |  |  |
| SOF: |  |  |  |  |  |  |  |  |  |

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| **תרגיל 2** | **AL** | | **BX** | | **SI** | **ZF** | **CF** |  |  |
|  | **AH** | **AL** | **BH** | **BL** |  |  |  | **Address** | **Memory** |
| MOV SI, 1000H |  |  |  |  | 1000H |  |  | 1000H | 25H |
| MOV AL, [SI] |  | 25H |  |  |  |  |  | 1001H | 25H |
| INC SI |  |  |  |  | 1001H | 0 |  | 1002H | 25H |
| MOV AH, [SI] | 25H |  |  |  |  |  |  | 1003H | 0H |
| INC SI |  |  |  |  | 1002H | 0 |  |  |  |
| MOV BX, 1003H |  |  | 10H | 03H |  |  |  |  |  |
| SUB AL, AH |  | 00H |  |  |  | 1 | 0 |  |  |
| JZ NEXT |  |  |  |  |  |  |  |  |  |
| MOV [BX], 255 |  |  |  |  |  |  |  |  |  |
| JMP END |  |  |  |  |  |  |  |  |  |
| NEXT: |  |  |  |  |  |  |  |  |  |
| SUB AH, [SI] | 00H |  |  |  |  | 1 | 0 |  |  |
| JZ Equal |  |  |  |  |  |  |  |  |  |
| MOV [BX], 255 |  |  |  |  |  |  |  |  |  |
| JMP SOF |  |  |  |  |  |  |  |  |  |
| Equal: |  |  |  |  |  |  |  |  |  |
| MOV [BX], 0H |  |  |  | 0H |  |  |  |  |  |
| END: |  |  |  |  |  |  |  |  |  |

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| **תרגיל 3** | **AL** | | **BX** | | **SI** | **ZF** | **CF** |  |  |
|  | **AH** | **AL** | **BH** | **BL** |  |  |  | **Address** | **Memory** |
| MOV SI, 2000H |  |  |  |  | 2000H |  |  | 2000H | 25H |
| MOV BX, 3000H |  |  | 30H | 00H |  |  |  | 2001H | 20H |
| MOV AL, [SI] |  | 25H |  |  |  |  |  | 3000H | 7H |
| INC SI |  |  |  |  | 2001H |  |  |  |  |
| SUB AL, [SI] |  | 05H |  |  |  |  |  |  |  |
| JC SMALL |  |  |  |  |  |  |  |  |  |
| MOV [BX], 7H |  |  |  |  |  |  |  |  |  |
| JMP END |  |  |  |  |  |  |  |  |  |
| SMALL: |  |  |  |  |  |  |  |  |  |
| SUB [BX], 8H |  |  |  |  |  |  |  |  |  |
| END: |  |  |  |  |  |  |  |  |  |

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| --- |
| MOV SI, 4000H  MOV BX, 3000H  MOV AL, [SI]  INC SI  ADD AL, [SI]  SUB AL, [BX]  MOV BX, 1000H  JZ SMALL  JC SMALL  MOV [BX], 7H  JMP END  SAMALL:  MOV [BX], -7H  END: |

***תרגיל 5***

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| --- |
| MOV SI, 2000H  MOV AL, [SI]  INC SI  ADD AL, [SI]  MOV SI, 3000H  MOV BL, [SI]  INC SI  SUB BL, [SI]  MOV SI, 1000H  SUB AL, BL  JZ SMAL  JC SMALL  MOV [SI], 70H  MOV [SI + 1], 70H  JMP END  SMALL:  MOV [SI], 30H  MOV [SI + 1], 30H  END: |

**תרגיל 6**

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| --- |
| MOV SI, 200H  MOV BX, 205H  MOV AL, [SI]  INC SI  MOV AH, [SI]  INC SI  SUB AH, AL  JC NEXT  MOV [BX], 90H  JMP END  NEXT:  SUB [SI], AL  JC BIGEST  MOV [BX], 90H  JMP END  BIGEST:  MOV [BX], 80H  END: |

תרגיל 7

|  |
| --- |
| MOV SI, 1000H  ADD AL, [SI]  INC SI  ADD AL, [SI]  INC SI  ADD AL, [SI]  INC SI  SUB AL, 89H  JC SMALL  JZ SMALL  MOV [SI], 20H  JMP END  SMALL:  MOV [SI], 17H  END: |

תרגיל 8

|  |
| --- |
| MOV SI, 4000H  ADD AL, [SI]  INC SI  ADD AL, [SI]  MOV SI, 5000H  ADD BL, [SI]  INC SI  ADD BL, [SI]  MOV SI, 6000H  SUB AL, BL  JC SMALL  JZ SMALL  MOV SI, 88H  JMP SOF  SMALL:  SUB [SI], 12H  SOF : |