# אסמבלר

| 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: | | | | | | | | | |

| 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: | | | | | | | | | |

# אסמבלר

| תרגיל 3 | AL | | BX | | SI | ZF | CF | | Address | Memory |
|---|---|---|---|---|---|---|---|---|---|---|
| | AH | AL | BH | BL | | | | | | |
| MOV    SI, 2000H | | | | | 2000H | | | | 2000H | 25H |
| MOV    BX, 3000H | | | 30H | 00H | | | | | 2001H | 20H |
| MOV    AL, [SI] | | 25H | | | | | | | 3000H | 7H |
| INC SI | | | | | 2001H | 0 | | | | |
| SUB    AL, [SI] | | 05H | | | | 0 | 0 | | | |
| JC SMALL | | | | | | | | | | |
| MOV    [BX], 7H | | | | | | | | | | |
| JMP END | | | | | | | | | | |
| SMALL: | | | | | | | | | | |
| SUB [BX], 8H | | | | | | | | | | |
| END: | | | | | | | | | | |

```
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:
```

# אסמבלר

```
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:
```

```
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:
```

# אסמבלר

```
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:
```

```
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 :
```