

Q1

```

MOV AX, 7H
MOV BX, 6H
MOV CX, 3H
MOV DX, 8H

MOV [3000H], AX
MOV [3002H], BX
MOV [3004H], CX
MOV [3006H], DX

```

Random Access Memory
⊙

0100:3000
update

0100:3000	07 00 06 00 03 00 08 00
0100:3010	00 00 00 00 00 00 00 00
0100:3020	00 00 00 00 00 00 00 00
0100:3030	00 00 00 00 00 00 00 00
0100:3040	00 00 00 00 00 00 00 00
0100:3050	00 00 00 00 00 00 00 00
0100:3060	00 00 00 00 00 00 00 00
0100:3070	00 00 00 00 00 00 00 00

Q2(a)

```

01 MOV AX, 7H
02 MOV BX, 6H
03 MOV CX, 3H
04 MOV DX, 8H
05
06 MOV [3000H], AX
07 MOV [3002H], BX
08 MOV [3004H], CX
09 MOV [3006H], DX
10
11 MOV BX, 3000H
12
13 MOV AX, [BX]
14
15 MOV BX, 3002H
16
17 ADD AX, [BX]
18
19 MOV BX, 3004H
20
21 ADD AX, [BX]
22
23 MOV BX, 3006H
24
25 ADD AX, [BX]
26
27 MOV BX, 3008H
28
29 MOV [BX], AX

```

Random Access Memory
⊙

0100:3008
update

0100:3008	18 00 00 00 00 00 00 00
0100:3018	00 00 00 00 00 00 00 00
0100:3028	00 00 00 00 00 00 00 00
0100:3038	00 00 00 00 00 00 00 00
0100:3048	00 00 00 00 00 00 00 00
0100:3058	00 00 00 00 00 00 00 00
0100:3068	00 00 00 00 00 00 00 00
0100:3078	00 00 00 00 00 00 00 00

Q2(b)

open examples save compile emulate calculator convert

```

MOV AX, 7H
MOV BX, 6H
MOV CX, 3H
MOV DX, 8H

MOV [3000H], AX
MOV [3002H], BX
MOV [3004H], CX
MOV [3006H], DX

ADD AX, [3002H]
ADD AX, [3004H]
ADD AX, [3006H]
MOV [3008H], AX

```

Random Access Memory

0100:3008 update table

0100:3008	18	00	00	00	00	00	00	00	00-00
0100:3018	00	00	00	00	00	00	00	00	00-00
0100:3028	00	00	00	00	00	00	00	00	00-00
0100:3038	00	00	00	00	00	00	00	00	00-00
0100:3048	00	00	00	00	00	00	00	00	00-00
0100:3058	00	00	00	00	00	00	00	00	00-00
0100:3068	00	00	00	00	00	00	00	00	00-00
0100:3078	00	00	00	00	00	00	00	00	00-00

emulator: noname.bin_

file math debug view external virtual devices

Load reload step back single step

registers

	H	L
AX	00	18
BX	00	06
CX	00	03
DX	00	08

0100:003E

0102D:	90	144	É
0102E:	90	144	É
0102F:	90	144	É
01030:	90	144	É
01031:	90	144	É

Q2(c)

```

MOV AX, 7H
MOV BX, 6H
MOV CX, 3H
MOV DX, 8H

MOV [3000H], AX
MOV [3002H], BX
MOV [3004H], CX
MOV [3006H], DX

MOV BX, 3000H
ADD AX, [BX+2H]
ADD AX, [BX+4H]
ADD AX, [BX+6H]
MOV [BX+8H], AX

```

Random Access Memory

0100:3008 update table

0100:3008	18	00	00	00	00	00	00	00	00-00
0100:3018	00	00	00	00	00	00	00	00	00-00
0100:3028	00	00	00	00	00	00	00	00	00-00
0100:3038	00	00	00	00	00	00	00	00	00-00
0100:3048	00	00	00	00	00	00	00	00	00-00
0100:3058	00	00	00	00	00	00	00	00	00-00
0100:3068	00	00	00	00	00	00	00	00	00-00
0100:3078	00	00	00	00	00	00	00	00	00-00

emulator: noname.bin_

file math debug view external virtual devices

Load reload step back single step

registers

	H	L
AX	00	18
BX	30	00
CX	00	03
DX	00	08

0100:003E

0102D:	90	144	É
0102E:	90	144	É
0102F:	90	144	É
01030:	90	144	É
01031:	90	144	É