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1. Somar três variáveis inteiras

Registradores da CPU															
A: 23h: 00100011b 35				B: 00h: 00000000b				Flags: 00h: 00000000b C: 0 Z: 0				IP: 00h: 00001000b 8			
M															
ADD A,[20]		???	???	???	???	???	???	???	???	???	???	???	???	???	???
02h	[0]	10	[20]	0	[40]	0	[60]	0	[80]	0	[100]	0	[120]	0	[140]
20		[1]	20	[21]	0	[41]	0	[61]	0	[81]	0	[101]	0	[121]	0
02h		[2]	5	[22]	0	[42]	0	[62]	0	[82]	0	[102]	0	[122]	0
21		[3]	35	[23]	0	[43]	0	[63]	0	[83]	0	[103]	0	[123]	0
ADD A,[22]		???	???	???	???	???	???	???	???	???	???	???	???	???	???
02h	[4]	0	[24]	0	[44]	0	[64]	0	[84]	0	[104]	0	[124]	0	0
22		[5]	???	???	???	???	???	???	???	???	???	???	???	???	???
MOV [23],A		???	???	???	???	???	???	???	???	???	???	???	???	???	???
a2h	[6]	0	[26]	0	[46]	0	[66]	0	[86]	0	[106]	0	[126]	0	0
23		[7]	0	[27]	0	[47]	0	[67]	0	[87]	0	[107]	0	[127]	0
0		???	???	???	???	???	???	???	???	???	???	???	???	???	???
0	[8]	0	[28]	0	[48]	0	[68]	0	[88]	0	[108]	0	[128]	0	0

Soma os valores das posições 20, 21, 22 e coloca na posição 23.

2. Identificar se numero é igual a zero

Registradores da CPU

A: 01h: 00000001b
1

B: 00h: 00000000b
0

Flags: 40h: 01000000b
C: 0 Z: 1

IP: 2Ch: 00101100b
44

Instruction	Register	Value	Segment	Register	Value	Segment	Flag
MOV A,[20]	0	0	0	MOV A,[22]	1	0	0
20	0	2	0	22	0	8	0
CMP A,[21]	1	2	0	MOV [60],A	0	8	0
3ah	1	2	0	a2h	0	10	0
21	0	3	0	CMP A,0	0	10	0
JZ 40	0	4	0	60	0	10	0
74h	0	4	0	???	0	10	0
40	0	5	0	???	0	10	0
MOV [60],A	0	6	0	???	0	10	0
a2h	0	6	0	???	0	10	0
CMP A,0	0	7	0	???	0	10	0
60	0	7	0	???	0	10	0

Mostra no posição 60 1 se é 0 e 0 se for outro número.

3. Dado três variáveis inteiras (bytes sem sinal), contar quantas são maiores que 10

Registers de la CPU									
A: 00h: 00001010b 10	B: 00h: 00000000b 0	Flags: 00h: 00000000b C: 0 Z: 0	IP: 00h: 00001100h 14						
MOV A,[20] ??? a0h [0] 10	MOV A,[24] ??? a0h [40] 0	MOV A,[24] ??? a0h [60] 0	MOV A,[24] ??? a0h [80] 0	???	???	???	???	???	???
20 [1] 22	24 [21] 24	44 [61] 24	84 [81] 0	???	???	???	???	???	???
CMP A,[21] ??? 3ah [2] 11	ADD A,[25] ??? 02h [42] 0	ADD A,[25] ??? 02h [62] 0	ADD A,[25] ??? 02h [82] 0	???	???	???	???	???	???
21 [3] 9	25 [23] 25	63 [63] 25	83 [83] 0	???	???	???	???	???	???
JC 40 ??? 72h [4] 1	MOV A,[25] ??? a2h [44] 0	MOV [25] A ??? a2h [64] 0	MOV [25] A ??? a2h [84] 0	???	???	???	???	???	???
ADD A,[0] ??? 40 [5] 2	25 [45] 25	65 [65] 25	85 [85] 0	???	???	???	???	???	???
CMP A,[22] ??? 3ah [6] 0	MOV A,[26] ??? a0h [46] 0	MOV A,[26] ??? a0h [66] 0	MOV A,[26] ??? a0h [86] 0	???	???	???	???	???	???
22 [7] 0	26 [26] 20	67 [67] 20	87 [87] 0	???	???	???	???	???	???
JC 60 ??? 72h [8] 0	JMP 6 ??? ebh [48] 0	JMP 10 ??? ebh [68] 0	???	???	???	???	???	???	???
CMP A,58 ??? 60 [9] 0	29 [49] 6	69 [69] 10	89 [89] 0	???	???	???	???	???	???
CMP A,[23] ??? 3ah [10] 0	30 [50] 0	70 [70] 0	90 [90] 0	???	???	???	???	???	???
23 [11] 0	31 [51] 0	71 [71] 0	91 [91] 0	???	???	???	???	???	???
JC 80 ??? 72h [12] 0	32 [52] 0	72 [72] 0	92 [92] 0	???	???	???	???	???	???
80 [13] 0	33 [53] 0	73 [73] 0	93 [93] 0	???	???	???	???	???	???

Se for maior que 10 incrementa 1 na posição 25.

4. Dado três variáveis inteiras (bytes sem sinal), somar as variáveis maiores que 10

Registadores da CPU													
A: 0Ah: 00001010b 10	B: 00h: 00000000b 0	Flags: 00h: 00000000b C: 0 Z: 0	IP: 0Eh: 00001110b 14	SP: 00h: 00000000b 0									
Memoria													
MOV A,[20] ??? a0h [0] 10 [20]	MOV A,[21] ??? a0h [40]	MOV A,[22] ??? a0h [60]	MOV A,[23] ??? a0h [80]	MOV A,[24] ??? 0 [100]	MOV A,[25] ??? 0 [120]	MOV A,[26] ??? 0 [140]	MOV A,[27] ??? 0 [160]	MOV A,[28] ??? 0 [180]	MOV A,[29] ??? 0 [200]				
20 [1] 22 [21]	21 [41]	22 [61]	23 [81]	0 [101]	0 [121]	0 [141]	0 [161]	0 [181]	0 [201]				
CMP A,[21] ??? 3ah [2] 11 [22]	ADD A,[25] ??? 02h [42]	ADD A,[25] ??? 02h [62]	ADD A,[25] ??? 02h [82]	ADD A,[25] ??? 0 [102]	ADD A,[25] ??? 0 [122]	ADD A,[25] ??? 0 [142]	ADD A,[25] ??? 0 [162]	ADD A,[25] ??? 0 [182]	ADD A,[25] ??? 0 [202]				
21 [3] 9 [23]	25 [43]	25 [63]	25 [83]	0 [103]	0 [123]	0 [143]	0 [163]	0 [183]	0 [203]				
JC 40 ??? 72h [4] 0 [24]	MOV [25],A ??? a2h [44]	MOV [25],A ??? a2h [64]	MOV [25],A ??? a2h [84]	MOV [25],A ??? 0 [104]	MOV [25],A ??? 0 [124]	MOV [25],A ??? 0 [144]	MOV [25],A ??? 0 [164]	MOV [25],A ??? 0 [184]	MOV [25],A ??? 0 [204]				
40 [5] 33 [25]	25 [45]	25 [65]	25 [85]	0 [105]	0 [125]	0 [145]	0 [165]	0 [185]	0 [205]				
CMP A,[22] ??? 3ah [6] 0 [26]	MOV A,[20] ??? a0h [46]	MOV A,[20] ??? a0h [66]	MOV A,[20] ??? a0h [86]	MOV A,[20] ??? 0 [106]	MOV A,[20] ??? 0 [126]	MOV A,[20] ??? 0 [146]	MOV A,[20] ??? 0 [166]	MOV A,[20] ??? 0 [186]	MOV A,[20] ??? 0 [206]				
22 [7] 0 [27]	20 [47]	20 [67]	20 [87]	0 [107]	0 [127]	0 [147]	0 [167]	0 [187]	0 [207]				
JC 60 ??? 72h [8] 0 [28]	JMP 6 ??? ebh [48]	JMP 10 ??? ebh [68]	JMP 10 ??? ebh [88]	JMP 10 ??? 0 [108]	JMP 10 ??? 0 [128]	JMP 10 ??? 0 [148]	JMP 10 ??? 0 [168]	JMP 10 ??? 0 [188]	JMP 10 ??? 0 [208]				
CMP A,[23] ??? 60 [9] 0 [29]	6 [49]	10 [69]	0 [89]	0 [109]	0 [129]	0 [149]	0 [169]	0 [189]	0 [209]				
CMP A,[23] ??? 3ah [10] 0 [30]	0 [50]	0 [70]	0 [90]	0 [110]	0 [130]	0 [150]	0 [170]	0 [190]	0 [210]				
23 [11] 0 [31]	0 [51]	0 [71]	0 [91]	0 [111]	0 [131]	0 [151]	0 [171]	0 [191]	0 [211]				
JC 80 ??? 72h [12] 0 [32]	0 [52]	0 [72]	0 [92]	0 [112]	0 [132]	0 [152]	0 [172]	0 [192]	0 [212]				
80 [13] 0 [33]	0 [53]	0 [73]	0 [93]	0 [113]	0 [133]	0 [153]	0 [173]	0 [193]	0 [213]				
0 [14] 0 [34]	0 [54]	0 [74]	0 [94]	0 [114]	0 [134]	0 [154]	0 [174]	0 [194]	0 [214]				

Se for maior que 10 soma o número na posição 25.