## 8086-3rd

; find if two elements are on main diagonal nodel small ;check if two 'a' are in same column.model small .stack .data nat db far, 'br, 'cr, 'dr, 'cr, 'xr, 'gr, 'hr, 'fir, 'gr, 'ar, 'fir, 'mr, 'nr, 'cr, 'xr res db ? .data
see db 'a','b','s', 's','a','f', 'b','h','i'
res dw ? res db ?

.code
.cotartup
.cor at..ci
.cor ax.ax
.cor bx.bx
.cor dx.dx
.cor d .code .startup xor si.si xor di.di xor ax.ax xor bx.bx xor cx.cx xor dx.dx xor dx dx
loop1:
nov al.pre[si]
nov al.pre[si]
in si
i imp loopt
next;
nov cs.ei ;cx has index of ist a
loop2;
nov di.mat[si]
de check
inp loop2
check
now dx.ei ;dx has index of 2nd a losp losp2
check:
jei has index of 2nd a
;div1
xor ax.ax
nov ax.di
nov bl.3
div bl check: ;si has index of 2nd a :div1 xor ax.ax mov ax.di mov b1.3 div b1 ; first division mov al.cl mov bl.5 div bl. 6 div bl. 8 dive skip :second division xor ax.ax mov al.dl cnp ah.8 jns skip ore bid.

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and the control of the contro div bl."

and cl.ah; renainder of dividing index of 1st a with 3
idiv2
now no.xis
div bl
now dl.ah; renainder of dividing index of 2nd a with 3 nov res,1 skip: .exit end cmp cl.dl jne skip mov res.i skip: .exit end

## nov ax,8x13 nov bx,8x87 div bl

; 19/7 q=2,r=5 ;if divided by bl ah has remainder ;if divided by bx dl has remainder

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Family

The state of the state 
      .model small
rtta
      din equ 64
zaneRow db 8
saneCol db 8
neither db 8
countUpper db 8
countLover db 8
index1 dw 8
index2 dw 8
index2 dv 0
.code

      xor dx,dx
; loop counter
nov cx,din
cycle:
nov al,field[si]
                    onp al,'a'
                    cmp al,'A'
je foundA
             caseCheck:
cnp al,97 ;9'
jl upper
inc countLower
jnp next
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  count total uppercase, total lower case
find if two As are in same row, same col or neither
      upper:
inc countUpper
jmp next
```