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| --- | --- | --- |
| ;PRINTING 0 TO 9  org 100h  .data  a db 0,1,2,3,4,5,6,7,8,9  .code  mov cx,10  mov si,0  loop1:  mov al,a[si]  mov dl,al  add dl,48  mov ah,2h  int 21h  INC si  loop loop1  Hlt | ;AVERAGE OF NUMBERS  DATA SEGMENT  ARRAY DB 1,4,2,3,8,6,7,5,9  AVG DB ?  MSG DB "AVERAGE = $"  ENDS  CODE SEGMENT  ASSUME DS:DATA CS:CODE  START:  MOV AX,DATA  MOV DS,AX  LEA SI,ARRAY  LEA DX,MSG  MOV AH,9  INT 21H  MOV AX,00  MOV BL,9  MOV CX,9 | LOOP1:  ADD AL,ARRAY[SI]  INC SI  LOOP LOOP1  DIV BL  ADD AL,30H  MOV DL,AL  MOV AH,2  INT 21H  MOV AH,4CH  INT 21H  ENDS  END START |
| ;LARGEST NUMBER  DATA SEGMENT  array db 0,1  ENDS  CODE SEGMENT  ASSUME DS:DATA CS:CODE  START:  MOV AX,DATA  MOV DS,AX  MOV AL,array[si]  MOV SI,0  MOV BL,1    LOOP1:INC SI  CMP AL,array[SI]  JGE LOOP2  MOV AL,array[SI]    LOOP2:DEC BL  JNZ LOOP1    ADD AL,30H  MOV DL,AL  MOV AH,02h  INT 21h  hlt  ENDS  END START | ;SORTING  DATA SEGMENT  A DB 5,9,2,7,2,1  COUNT EQU 6  DATA ENDS  CODE SEGMENT  ASSUME CS:CODE, DS:DATA  START: MOV AX,DATA  MOV DS,AX  MOV CX,COUNT  MOV DX,CX  DEC DX  MOV SI,0  OUT\_LOOP: CMP DX,SI  JZ NXT  MOV AL,A[SI]  MOV BL,A[SI+1]  CMP AL,BL  JA SWAP  INC SI  JMP OUT\_LOOP | SWAP: MOV A[SI],BL  MOV A[SI+1],AL  INC SI  JMP OUT\_LOOP  NXT: MOV SI,0H  SUB CX,1  CMP CX,0  JNZ OUT\_LOOP  MOV CX,COUNT  MOV SI,0  PRI: MOV DL,A[SI]  ADD DL,48  MOV AH,2H  INT 21H  INC SI  LOOP PRI  CODE ENDS  END START |
| ;LCM  a db 2  b db 3  mov al,a  mov bl,b  mov ah,0  mov bh,al  div bl  cmp ah,0  jz exit  loop loop1  loop1:  mov ah,0  mov al,bh  add al,a  mov bh,al  div bl  cmp ah,0  jz exit  loop loop1 | exit:  mov dl,bh  add dl,48  mov ah,2  int 21h | ;GCD  mov al,2  mov bl,5  mov ah,0  cmp al,bl  ja next  xchg al,bl  next:  mov bh,bl  div bl  cmp ah,0  je l1  mov al,bh  mov bl,ah  mov ah,0  jmp next  l1:  mov dl,bl  add dl,48  mov ah,2h  int 21h |
| ;MATCHING CHARACTERS  DATA SEGMENT 100h  msg db 'SRM AP'  count equ ($ - msg)  pass db ' '  DATA ENDS  CODE SEGMENT  ASSUME DS:DATA,CS:CODE  START:  mov ax,data  mov ds,ax  lea si,msg  lea di,pass  mov cx,count  loop1:  mov al,[si]  cmp al,[di]  je l2  inc si  loop loop1  l1:  mov dl,'N'  mov ah,2h  int 21h  hlt  l2:  mov dl,'Y'  mov ah,2h  int 21h  hlt  CODE ENDS  END START | ;COPY CHARACTERS  DATA SEGMENT 100h  msg DB "SRM AP"  count EQU ($-msg)  ENDS  CODE SEGMENT  ASSUME DS:DATA,CS:CODE,ES:DATA  START:  mov ax,DATA  mov ds,ax  mov es,ax  lea si,msg  mov di,0x0Ah  mov cx,count  cld  rep movsb  ENDS  END START |  |
| ;NO OF VOWELS  DATA SEGMENT 100h  v db 'AEIOUaeiou'  count equ ($ - v)  msg db 'aeiou'  len equ ($ - msg)  print DB 'Number of Vowels : $'  DATA ENDS  CODE SEGMENT  ASSUME DS:DATA,CS:CODE  START:  MOV AX,DATA  MOV DS,AX  MOV BL,0  MOV BH,0  LEA DI,MSG  LEA DX,PRINT  MOV AH,9H  INT 21H  L1: | LEA SI,V  MOV CX,COUNT    LOOP1:  MOV AL,[SI]  CMP AL,[DI]  JE L2  L:  INC SI  LOOP LOOP1  INC BH  CMP BH,LEN  JE COMPLETED  INC DI  JMP L1    L2:  INC BL  JMP L    COMPLETED: | MOV DL,BL  add dl,48  MOV AH,2H  INT 21H    CODE ENDS  END START |