

Sorting

```
org 100h
.DATA
    input db 10 dup(0)
    prompt db 10,13,'Enter the numbers please: $'
    answer db 10,13,'The numbers in sorted order: $'
```

```
.CODE
```

```
MAIN PROC
```

```
    mov ax, @DATA
    mov ds, ax
    xor ax, ax
```

```
    mov ah, 09h
    lea dx, prompt
    int 21h
```

```
    mov ah, 01h
    mov cx, 10
    mov si, OFFSET input
```

```
inploop:
    int 21h
    mov [si], al
    inc si
    Loop inpLoop
```

```
Call Sort
```

```
    mov ah, 09h
    lea dx, answer
    int 21h
```

```
    mov cx, 10
    mov si, OFFSET input
    mov ah, 02h
```

```
outloop:
    mov dx, [si]
    int 21h
    inc si
    Loop outLoop
```

```
    mov ah, 4ch
    mov ah, 00h
    int 21h
```

```
MAIN ENDP
```

```
Sort PROC
```

```
    mov cx, 10
    dec cx
```

```
outerloop:
    mov bx, cx
    mov si, 0
```

```
    compLoop:
        mov al, input[si]
```

```
    mov dl, input[si+1]
    cmp al,dl

    jc noSwap

    mov input[si], dl
    mov input[si+1], al

noSwap:
    inc si
    dec bx
    jnz comploop
Loop outerLoop
ret
Sort ENDP
```