PRACTICAL – 40

AIM:

Write an assembly language program to arrange an array of 10 data in ascending order. The length of the list is in memory location 2200H and the series itself begins from memory location 2201H

CODE:

```
org 100h
mov [4000h],01h
mov [4001h],03h
mov [4002h],05h
mov [4003h],02h
mov [4004h],04h
mov [4005h],06h
mov bh,5

lab2:
mov si,4001h
mov cx,5

label1:
mov al,[si-1]
mov ah,[si]
cmp al,ah
jg l2
jmp repeat

l2:
mov dl,[si-1]
mov bl,[si]
```
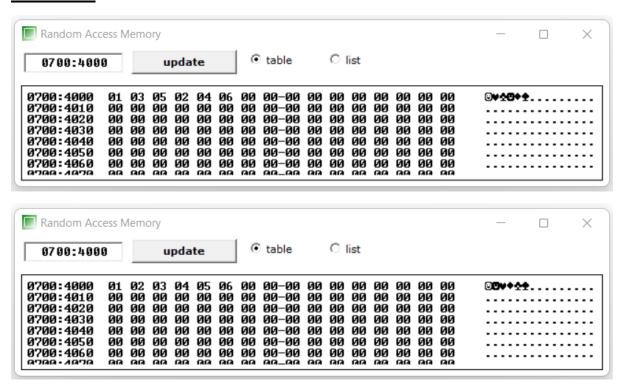
mov [si-1],bl
mov [si],dl
jmp repeat

repeat:
inc si
cmp si,4006h
jnz label1

dec bh
cmp bh,00h
jnz lab2
ret

OUTPUT:

CONCLUSION: In this practical, we learnt how to store array's data into a memory location in ascending order.