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| **STUDENT ID** | 19DCS098 | **STUDENT NAME** | Parth N Patel |
| **SUBJECT CODE** | CE 258 | **SUBJECT NAME** | MPCO |
| **DATE OF EXAM** | 29 April 2021 |  |  |

**DEFINITION:**

Write an ALP to perform sorting of array (size = 10) in ascending order. Consider starting location = 5000H . Store output from 6000H onwards

**SOLUTION:**

;Parth Niteshkumar Patel

;19DCS098

org 100h

; THE PROGRAM IS DIVIDED INTO TWO SECTIONS:

; 1. NUMBERS WILL BE ARRANGED IN ASCENDING ORDER

; 2. WILL TRANSFER ANSWER TO LOCATION 6000

; ASCENDING SECTION

mov DL,10

mov SI,5000h

mov DI,5000h

l2: mov AL,[SI]

mov CL,DL

l1: inc SI

mov BL,[SI]

cmp AL,BL

jz next

jc next

xchg AL,BL

mov [SI],BL

next: loop l1

mov [DI],AL

mov AX,[DI]

inc AX

inc DI

mov SI,DI

dec DL

jnz l2

; TRANSFER SECTION

mov CL,10

mov SI,5001h

mov DI,6000h

l: mov AL,[SI]

mov [DI],AL

inc SI

inc DI

dec CL

jnz l

ret

**INPUT AND OUTPUT SCREENSHOTS:**

**Memory location : 5000H**



**After Execution**

**Memory Location:6000H**

