

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,6000h

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

0700:5000	90	80	70	60	50	40	30	20-01	00	00	00	00	00	00	00
0700:5010	00	00	00	00	00	00	00	00-00	00	00	00	00	00	00	00

After Execution

Memory Location:6000H

0700:6000	00	01	20	30	40	50	60	70-80	90	00	00	00	00	00	00
0700:6010	00	00	00	00	00	00	00	00-00	00	00	00	00	00	00	00