

Experiment No. 6

Write a program in 8086 microprocessor to sort the 8-bit n numbers in ascending or descending order.

MOV SI, 500

MOV CL, [SI]

DEC CL

X0 MOV SI, 500

MOV CH, [SI]

DEC CH

INC SI

X1 MOV AL, [SI]

INC SI

CMP AL, [SI]

JC/JNC **X2** (JC for ascending and JNC for descending)

XCHG AL, [SI]

DEC SI

XCHG AL, [SI]

INC SI

X2 DEC CH

JNZ **X1**

DEC CL

JNZ X0

INT 03

INPUT: 01, 05, 04, 02

OUTPUT: 01, 02, 04, 05