data segment

num1 db 5 ; First number (can be changed)

num2 db 8 ; Second number (can be changed)

max\_num db ? ; Variable to store the maximum

data ends

code segment

assume cs:code, ds:data

start:

; Initialize data segment

mov ax, data

mov ds, ax

; Load the two numbers

mov al, num1 ; Load first number into AL

mov bl, num2 ; Load second number into BL

; Compare the numbers

cmp al, bl

jge is\_max\_al ;jge (jump if greater or equal) If AL >= BL, AL is the maximum

mov max\_num, bl ; Else, BL is the maximum

jmp print\_max ; Jump to print the result

is\_max\_al:

mov max\_num, al ; Store AL as the maximum

print\_max:

; Load the maximum value

mov al, max\_num ; Load max number into AL

; Convert number to ASCII

add al, '0' ; Add ASCII offset to convert to a printable character

; Print the character

mov dl, al ; Move ASCII character to DL

mov ah, 02h ; DOS function to display character

int 21h ; Call DOS interrupt

; Halt the program

hlt

.MODEL SMALL

.STACK 100H

.DATA

MSG DB 'THE 256 ASCII CHARACTERS ARE :',0AH,0DH,'$'

LINE DB 0AH,0DH,'$'

.CODE

MAIN PROC

MOV AX , @DATA

MOV DS , AX

MOV AH , 2

LEA DX , MSG

INT 21H

MOV CX , 256 ;initialize cx,

MOV AH , 2

MOV DL , 0 ;initialize DL with 1st ascii character

@LOOP:

INT 21H

INC DL

DEC CX

JNZ @LOOP

;JNZ jump if not zero

MOV AH ,4CH

INT 21H

MAIN ENDP

END MAIN