

**;Write an assembly language program to scroll a window from row 5, column 20 to row 20, column 60 with a reverse video attributes. Then locate the cursor at row 12, column 30. And display a string as "Programming in Assembly Language is Fun".**

**TITLE 20\*20 WINDOW SCROLLING**

**.MODEL SMALL**

**.DATA**

**STRLEN DB 14**

**STRSZ DB ?**

**STR DB 14 DUP('\$')**

**STRTRM DB '\$'**

**.STACK**

**.CODE**

**MAIN PROC FAR**

**MOV AX, @DATA**

**MOV DS, AX**

**;; READING FROM THE USER**

**LEA DX, STRLEN**

**MOV AH, 0AH**

**INT 21H**

**;; CLEARING THE SCREEN**

**MOV AH, 00**

**MOV AL, 03H**

**INT 10H**

**;; MAKING 20 20 SCREEN**

**MOV AL, 00H**

**MOV CH, 00H**

**MOV CL, 30**

**MOV DH, 20**

**MOV DL, 50**

**MOV BH, 71H**

**MOV AH, 06H**

**INT 10H**

**;; PUSH AX  
MOV BH, 00  
MOV DH, 10  
MOV AX, 80  
SUB AL, STRSZ  
MOV DL, 02H  
DIV DL  
MOV DL, AL  
MOV AX, 0200H  
INT 10H**

**;; POP AX  
;; DISPLAYING THE STRING**

**LEA DX, STR  
MOV AH, 09H  
INT 21H**

**;; ENDING THE PROGRAM  
MOV AH, 4CH  
INT 21H  
MAIN ENDP  
END MAIN**