```
        INT 21H        ; Exit program

MAIN ENDP


; --------------------------

; Print 16-bit Hex Procedure

; --------------------------

PRINT_HEX PROC

    MOV CX, 4      ; We have 4 hex digits (16-bit / 4-bit each)

    MOV BX, 12     ; Bit shift amount (12, 8, 4, 0)


HEX_LOOP:

    MOV DX, AX     ; Copy AX value

    MOV CL, BL     ; Move shift count into CL (Fix for SHR error)

    SHR DX, CL     ; Shift right to isolate one hex digit

    AND DX, 0FH    ; Mask the lower 4 bits

    MOV SI, DX     ; Move index to SI

    MOV DL, [HEX_CHARS + SI] ; Convert to ASCII hex character

    MOV AH, 02H

    INT 21H        ; Print the hex digit

    SUB BX, 4      ; Move to the next hex digit

    LOOP HEX_LOOP  ; Repeat until all digits are printed


    RET

PRINT_HEX ENDP


END MAIN


OUTPUT:
```