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| **Task-1:** |
| .model small  .stack 100h  .data  msg1 db 'Enter a character: $'  msg2 db 13, 10, 'Character is not a letter (A-Z).$'  .code  main:  mov ax, @data  mov ds, ax  ; Prompt user  lea dx, msg1  mov ah, 09h  int 21h  ; Read a character into DL  mov ah, 01h  int 21h ; Character entered now in AL  mov dl, al ; Move it to DL for checking  ; Check if DL >= 'A'  cmp dl, 'A'  jl not\_letter ; If less than 'A', jump to not\_letter  ; Check if DL <= 'Z'  cmp dl, 'Z'  jg not\_letter ; If greater than 'Z', jump to not\_letter  ; If in range, print character  mov ah, 02h  int 21h  jmp exit  not\_letter:  ; Print error message  lea dx, msg2  mov ah, 09h  int 21h  exit:  mov ah, 4ch  int 21h  end main |
| **Output:** |

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| **Task-2:** |
| .MODEL small  .STACK 100h  .DATA  msg1 db "Enter a number (1-4): $"  msg2 db 0Dh, 0Ah, "Output: o$"  msg3 db 0Dh, 0Ah, "Output: e$"  .CODE  MAIN PROC  mov ax, @DATA  mov ds, ax  ; Display message to ask for input  mov ah, 09h  lea dx, msg1  int 21h  ; Take input from user  mov ah, 01h  int 21h  mov al, al ; AL already has the input  sub al, 30h ; Convert ASCII to number  ; Compare AL to decide output  cmp al, 1  je printO  cmp al, 3  je printO  cmp al, 2  je printE  cmp al, 4  je printE  jmp endProgram  printO:  mov ah, 09h  lea dx, msg2  int 21h  jmp endProgram  printE:  mov ah, 09h  lea dx, msg3  int 21h  endProgram:  mov ah, 4Ch  int 21h  MAIN ENDP  END MAIN |
| **Output:** |

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| **Task-3:** |
| .MODEL small  .STACK 100h  .DATA  box DB '\*\*\*\*\*\*\*\*\*\*', 0Dh, 0Ah  DB '\*\*\*\*\*\*\*\*\*\*', 0Dh, 0Ah  DB '\*\*\*\*\*\*\*\*\*\*', 0Dh, 0Ah  DB '\*\*\*\*\*\*\*\*\*\*', 0Dh, 0Ah  DB '\*\*\*\*\*\*\*\*\*\*', 0Dh, 0Ah  DB '\*\*\*\*\*\*\*\*\*\*', 0Dh, 0Ah  DB '\*\*\*\*\*\*\*\*\*\*', 0Dh, 0Ah  DB '\*\*\*\*\*\*\*\*\*\*', 0Dh, 0Ah  DB '\*\*\*\*\*\*\*\*\*\*', 0Dh, 0Ah  DB '\*\*\*\*\*\*\*\*\*\*', 0Dh, 0Ah, '$'    .CODE  MAIN PROC  MOV AX, @DATA  MOV DS, AX    ; Display the box  MOV DX, OFFSET box  MOV AH, 09h  INT 21h  ; Exit program  MOV AH, 4Ch  INT 21h  MAIN ENDP  END MAIN |
| **Output:** |