

**Department of Computer Science and Engineering**

**21st Batch**

**Lab Report 6**

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| Course title | : Microprocessor and Assembly Language |
| Course Code | : CSE-334 |

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| **Submitted By** | | **Submitted To** | |
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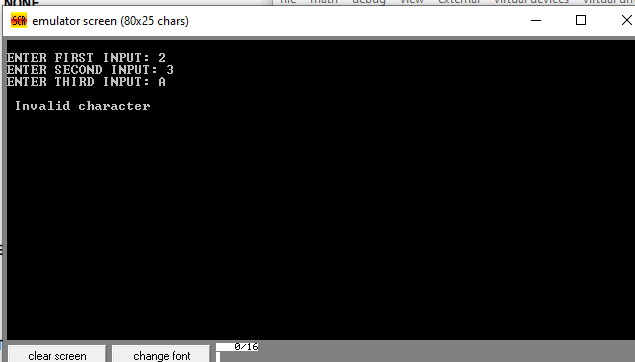
**Problem Statement:** Write an assembly program that will take three inputs from the user and you will need to check in any of those are non numeric characters, if they are then print “Invalid character” otherwise print “All OK”.

**Theory:** To Print if a input is Numeric or not we will have to take 3 inputs then check their ASCII code if they are greater then 9 or less then 0. By this logic we can Print if all the numbers are numerical or not.

**CODE:**

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| .MODEL SMALL  .STACK 100H  .DATA  NL EQU 0AH,0DH  A DB ?  B DB ?  C DB ?  IN\_A DB NL,"ENTER FIRST INPUT : $"  IN\_B DB NL,"ENTER SECOND INPUT : $"  IN\_C DB NL,"ENTER THIRD INPUT : $"  NO DB NL,NL," Invalid character $"  OK DB NL,NL," All OK $"  .CODE  MAIN PROC  MOV AX,@DATA  MOV DS,AX    MOV AH,9 ; FIRST NUMBER INPUT  LEA DX,IN\_A  INT 21H  MOV AH,1  INT 21H  MOV A,AL  MOV BL,A    MOV AH,9 ; SECOND NUMBER INPUT  LEA DX,IN\_B  INT 21H  MOV AH,1  INT 21H  MOV B,AL  MOV BH,B    MOV AH,9 ; THIRD NUMBER INPUT  LEA DX,IN\_C  INT 21H  MOV AH,1  INT 21H  MOV C,AL  MOV CL,C    CMP BL,30H ; CHECK  JL NONE  CMP BL,39H  JG NONE  CMP BH,30H  JL NONE  CMP BH,39H  JG NONE  CMP CL,30H  JL NONE  CMP CL,39H  JG NONE    MOV AH,9 ;ALL OK  LEA DX,OK  INT 21H  JMP NEXT    NONE:  MOV AH,9 ;Not OK  LEA DX,NO  INT 21H    NEXT:  MOV AH,4CH  INT 21H  MAIN ENDP  END MAIN |

**Result:**

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