<https://youtu.be/IrBbPtcYwSg>

; Program Template (lab9.asm)

; Program Description: Ask the user to enter both ranges j, K and the number num you want to check. Output the suitable message based on the situation

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.386

.model flat,stdcall

.stack 4096

ExitProcess PROTO, dwExitCode:DWORD

INCLUDE Irvine32.inc

.data

; declare variables here

Input1 BYTE "Enter J - begining of the range: ", 0 ;string for J

Input2 BYTE "Enter K - end of the range: ", 0 ;string for K

Input3 BYTE "Enter the value you want to check: ", 0 ;string for check value

Output1 BYTE " is within the range ", 0 ;string for within range

Output2 BYTE " is outside the range ", 0 ;string for outside range

Output3 BYTE " to ", 0 ;string

;intialize valiables

J DWORD ?

K DWORD ?

num DWORD ?

.code

main PROC

;write your code here

;prompt input for J

mov edx, OFFSET Input1

call WriteString

call ReadInt

mov J, eax

;prompt input for K

mov edx, OFFSET Input2

call WriteString

call ReadInt

mov K, eax

;prompt for check value

mov edx, OFFSET Input3

call WriteString

call ReadInt

mov num, eax

;move values into registers

mov eax, J

mov ebx, K

mov ecx, num

;check if num is greater than J

cmp ecx, eax

jge check1

jmp outside

;check if num is greater than K

check1: cmp ecx, ebx

jg outside

;inside output

inside: mov eax, num

call WriteDec

mov edx, OFFSET Output1

call WriteString

mov eax, J

call WriteDec

mov edx, OFFSET Output3

call WriteString

mov eax, K

call WriteDec

jmp bye

;outside output

outside: mov eax, num

call WriteDec

mov edx, OFFSET Output2

call WriteString

mov eax, J

call WriteDec

mov edx, OFFSET Output3

call WriteString

mov eax, K

call WriteDec

;leave process

bye:

call DumpRegs

INVOKE ExitProcess, 0

main ENDP

; (insert additional procedures here)

END main