Assignment 2

Question 1.

If you answer your code correctly, at the end EDX contains 127h.

﻿.386

.MODEL flat, stdcall

.STACK 4096

ExitProcess Proto, dwExitCode:DWORD

.DATA

val1 WORD 120h

val2 WORD 39h

val3 WORD 20h

val4 WORD 27h

.CODE

main PROC

mov AX, val3

add AX, val4

mov BX, val2

sub BX, val1

sub AX, BX

sub AX, (5/3)\*7

movsx EDX, AX

INVOKE ExitProcess, 0

main ENDP

END main

Question 2.

If you code it correctly. ECX register holds FFFFFFD8

﻿.386

.MODEL flat, stdcall

.STACK 4096

ExitProcess Proto, dwExitCode:DWORD

.DATA

val1 BYTE 12

val2 WORD 9

val3 DWORD 2

val4 BYTE 20

.CODE

main PROC

movsx EAX, val1

add EAX, val3

neg EAX

movsx BX, val4

neg BX

sub BX, val2

movsx EBX, BX

add EAX, EBX

add EAX, 3

mov ECX, EAX

INVOKE ExitProcess, 0

main ENDP

END main

﻿Question3.

If you code correctly, the first item of the array 8C, second item of the array 91,and third item of the array FFFFFF7D

.386

.MODEL flat, stdcall

.STACK 4096

ExitProcess Proto, dwExitCode:DWORD

.DATA

z DWORD 3 DUP(?)

x WORD 10

y WORD 15

r WORD 4

.CODE

main PROC

movsx eax, x

add eax, 130

mov [z+0], eax

mov ax, y

sub ax, x

movsx eax, ax

add eax, [z+0]

mov [z+4], eax

mov ax, r

add ax, x

movsx eax, ax

sub eax, [z+4]

mov [z+8], eax

INVOKE ExitProcess, 0

main ENDP

END main