

TASK 1

.data

myBytes BYTE 10h,20h,30h,40h

myWords WORD 3 DUP(?),2000h

myString BYTE "ABCDE"

Part a: -

mov eax,TYPE myBytes → Type 1

mov eax,LENGTHOF myBytes → Length 4

mov eax,SIZEOF myBytes → Size 4

mov eax,TYPE myWords → Type 2

mov eax,LENGTHOF myWords → Length 4

mov eax,SIZEOF myWords → Size $4*2 = 8$

mov eax,SIZEOF myString → String size $5*1 = 5$

Part b: -

Mov dx, word ptr (myBytes)

Part c: -

Mov al, Byte ptr [myWord + 1]

Part d: -

Mov eax, doubleWord ptr []myBytes

TASK 3

; Description:

;

; Revision date:

INCLUDE Irvine32.inc

.data

myMess2 BYTE "The Sum is: " , 0

array DWORD 1,2,3,4,5,6,7,8,9,10

ArraySize = (\$ - Array) / TYPE array

sample DWORD 50

sum DWORD 0

.code

main PROC

call Clrscr

mov ecx, arraysize

xor ebx, ebx

mov eax, sum

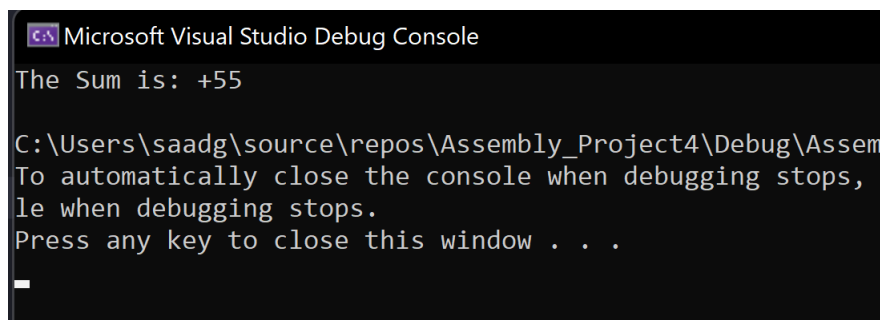
.WHILE ebx < ecx

```

        mov edx, array[ebx*4]
        .IF eax <= sample
            add eax,edx
        .ENDIF
        inc ebx
    .ENDW
    push eax;
    mov edx,offset myMess2
    call WriteString
    pop edi
    call WriteInt
    call Crlf
    exit
main ENDP
END main

```

OUTPUT



```

Microsoft Visual Studio Debug Console

The Sum is: +55

C:\Users\saadg\source\repos\Assembly_Project4\Debug\Assembly_Project4.exe
To automatically close the console when debugging stops, please click
the console icon on the left side of the Visual Studio window when debugging stops.
Press any key to close this window . . .

```

TASK 2

```

INCLUDE Irvine32.inc
.data
NUMS    BYTE 1,2,3,4,5
sep1    BYTE ", ",0

.code
main PROC

    mov edi,OFFSET NUMS
    mov ecx,LENGTHOF NUMS
    mov ebx,TYPE NUMS
    mov edx,OFFSET sep1

L1:
    mov eax,12345
    add edi, TYPE NUMS
    call WriteDec
    call ReadDec
    call WriteString
    loop L1

    call Crlf
    exit
main ENDP

END main

```

OUTPUT

