

PROCEDURES

س1: اكتب برنامج لتعريف مصفوفة من نوع byte المطلوب قراءة ست قيم وجمع قيم هذا المصفوفة وطباعة ناتج المصفوفة بمتغير the sum= ثم ايجاد لمفكوك لناتج الجمع باستخدام procedure

```
include irvine32.inc
.data
a byte 6 dup(0)
b byte "the sum = ";0

var byte ?
.code
main proc
    call read
    call sum
    call string
    call fact
    call crlf

    exit
main endp

read proc
    mov esi,offset a
    mov ecx,6
l: call readint
    mov [esi],al
    add esi,1
    loop l
read endp

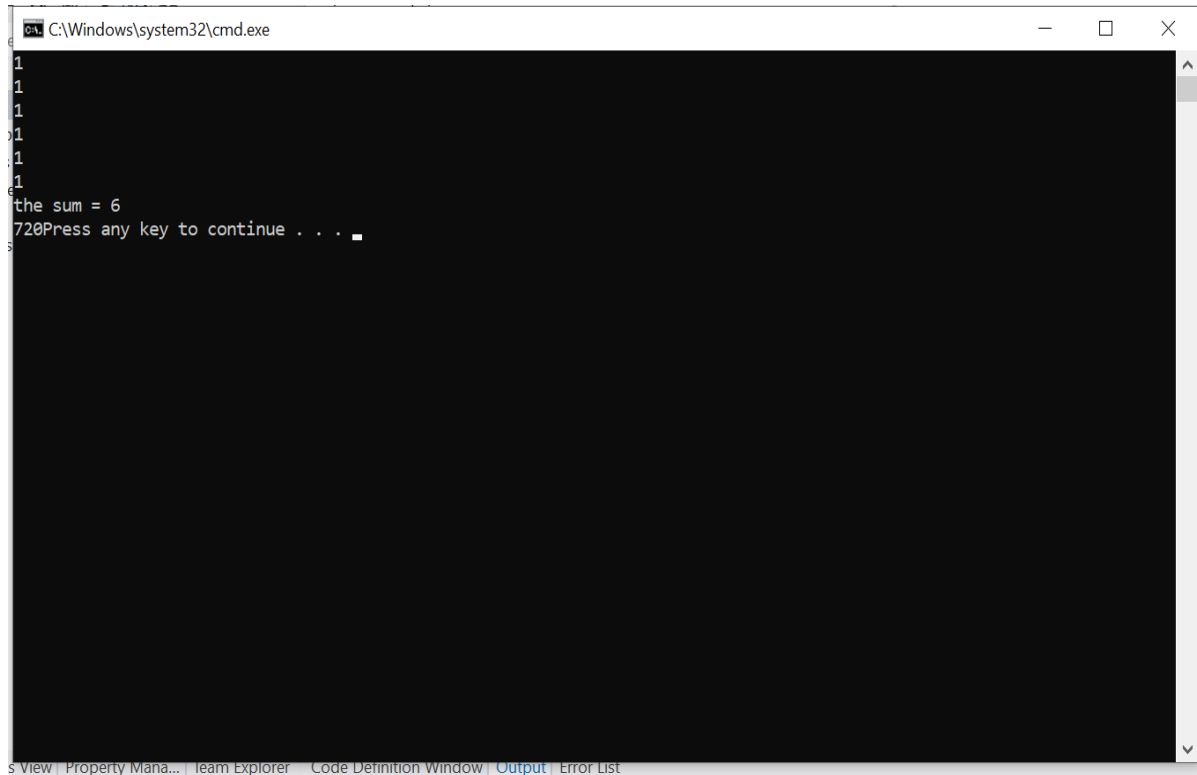
sum proc
    mov esi,offset a
    mov ecx,6
    mov al,0
l:add al,[esi]
    add esi,1
    loop l
sum endp

string proc

    mov edx,offset b
    call writestring
    call writedec
string endp

fact proc
    movzx ecx,al
    mov eax,1
l :mul ecx

    loop l
    call crlf
    call writedec
fact endp
end main
```



A screenshot of a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The window has a black background with white text. The text displayed is as follows:

```
1  
1  
1  
1  
1  
1  
1  
1  
1  
the sum = 6  
720Press any key to continue . . .
```

At the bottom of the window, there is a status bar with the following text: "s View | Property Mana... | leam Explorer | Code Definition Window | Output | Error List".

س2: اكتب برنامج بلغة الاسبلي يقوم بقراءة ست اعداد من نوع word وخرنه بمصفوفة ومن ثم طباعة المصفوفة بشكل معكوس باستخدام procedure

```
include irvine32.inc
.data
a word 6 dup(0)

b word 6 dup(0)
.code
main proc
    call read
    call res
    call print
    exit
main endp

read proc
    mov esi,offset a
    mov ecx,6
l: call readint
    mov [esi],ax
    add esi,2
    loop l
read endp

res proc
    mov esi,offset a
    mov edi,offset b
    add esi,10
    mov ecx,6
l: mov ax,[esi]
    mov [edi],ax
    add edi,2
    sub esi,2
    loop l
res endp

print proc
    mov esi,offset a
    mov ecx,6
    mov ebx,2
    call dumpmem
    call crlf
    mov esi,offset b
    mov ecx,6
    mov ebx,2
    call dumpmem

print endp
end main
```



A screenshot of a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The window has a black background with white text. The text shows a series of memory dump operations. At the top, there are line numbers 1 through 6. Below these, the text "Dump of offset 006C5000" is followed by a dashed line and the hex values "0001 0002 0003 0004 0005 0006". This is followed by another "Dump of offset 006C500C" command, another dashed line, and the hex values "0006 0005 0004 0003 0002 0001". The final line of text is "Press any key to continue . . .", followed by a small cursor.

```
C:\Windows\system32\cmd.exe
1
2
3
4
5
6
Dump of offset 006C5000
-----
0001 0002 0003 0004 0005 0006

Dump of offset 006C500C
-----
0006 0005 0004 0003 0002 0001
Press any key to continue . . .
```