Practical No - 9

```
section .bss
        disbuff resb 01

%macro print 2
        mov eax,4
        mov ebx,1
        mov ecx,%1
        mov edx,%2
        int 80h
%endmacro

section .data
        array1 db 11h,22h,33h,44h,55h
        msg1 db 0Ah,"Source Block contents are",0Ah
        len1 equ $-msg1

        msg2 db 0Ah,"Overlapped Destination Block contents are:",0Ah
        len2 equ $-msg2

        msg3 db " ";
        len3 equ $-msg3

        shift equ 02

section .text
        global _start

_start:

        ; display source array
        print msg1,len1
        mov esi,array1
        mov ecx,05h
        l1:
        push rcx
        mov bl,[esi]
        call dispnum
        print msg3,len3
        inc esi
        pop rcx
        loop l1

; overlapp the block array1
        dec esi
```

```
        mov edi,esi
        mov eax,shift
        add edi,eax ;so it will point 2 locations ahead
        mov ecx,05h ; refill array count

; actual overlapping
l2:
        mov al,[esi]
        mov[edi],al
        dec esi
        dec edi
        loop l2

; std ;for string instructions only 2 lines
; rep movsb

; to display destination block
; increment ecx by shift loca(2)

        print msg2,len2
        mov ecx,07h
        mov esi,array1

l3:
        push rcx
        mov bl,[esi]
        call dispnum
        print msg3,len3
        inc esi
        pop rcx
        loop l3

        mov eax,01
        mov ebx,00
        int 80h

dispnum :
        mov ecx, 2
        mov edi, disbuff

up1 :
        rol bl, 4
        mov al,bl
```

```
        and al,0Fh
        cmp al,09h
        jbe skip
        sub al,07h

skip :
        add al,30h
        mov [edi],al
        inc edi
        loop up1
        print disbuff,2
        Ret
```

Output -