

National University of Computer and Emerging Sciences



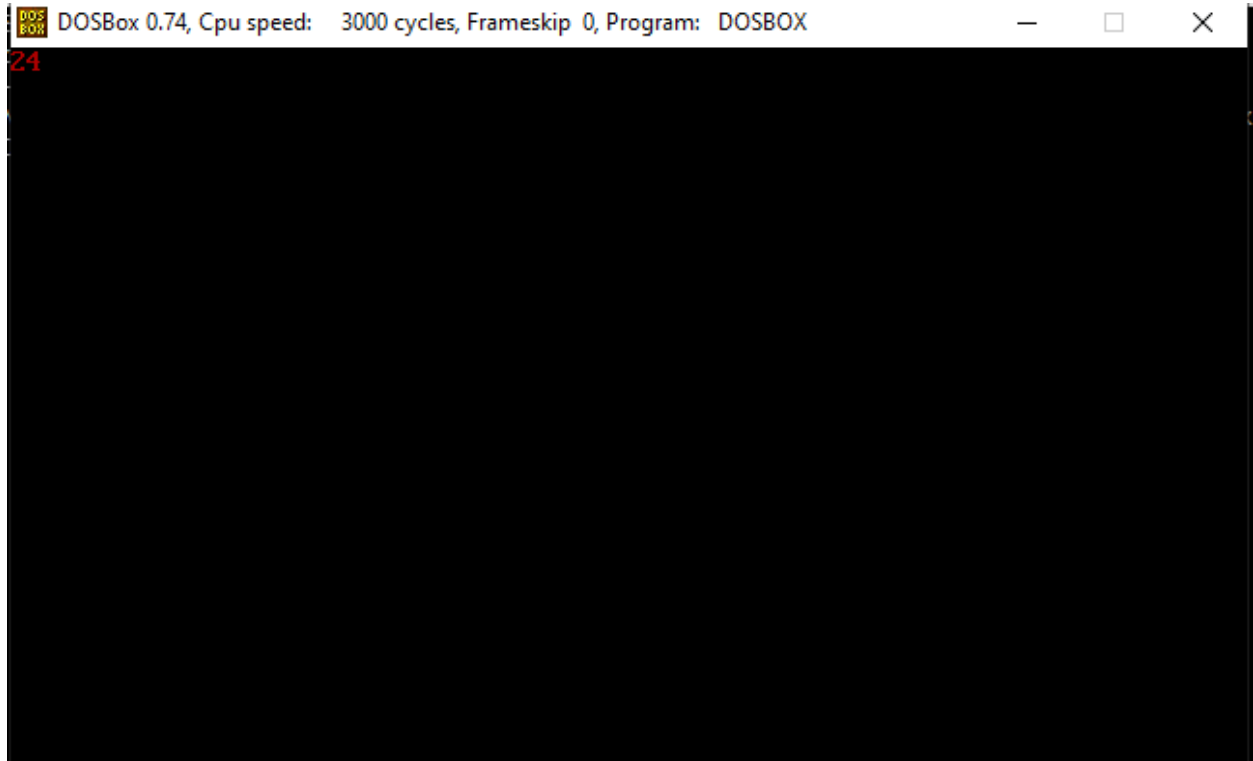
Lab Manual 9 **Computer Organization and Assembly Language Lab**

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Section	BCS 3E
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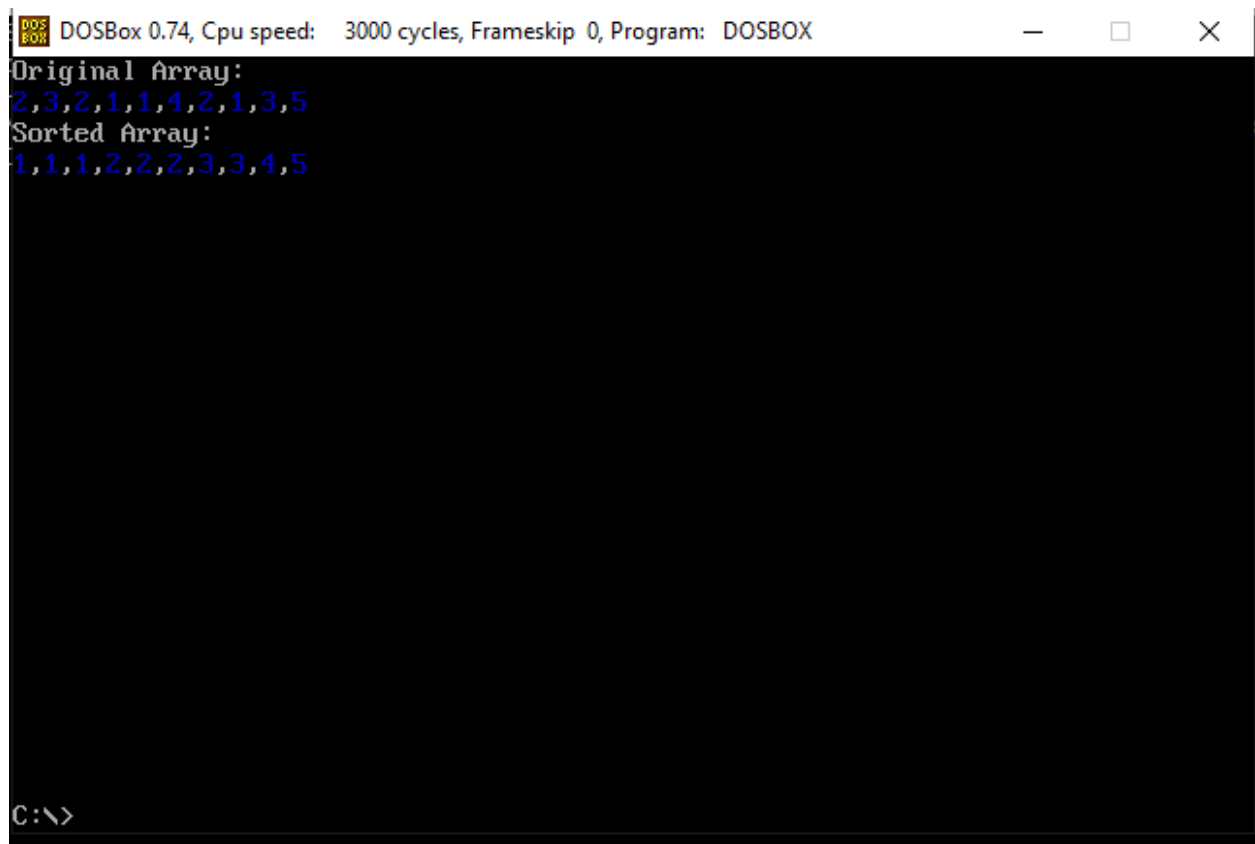
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Lab Manual – Revision

Activity 1: Write a subroutine program that sums up all the numbers in an array (10 elements) and display the result on screen.



Activity 2: Write a subroutine program that arranges all the numbers in an array in ascending order (10 elements) and display both the original & sorted array on screen.

A screenshot of a DOSBox window. The title bar reads "DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX". The window has standard Windows window controls (minimize, maximize, close). The main area is black with white text. It displays "Original Array:" followed by "2,3,2,1,1,4,2,1,3,5" where the numbers 2, 3, 4, and 5 are in blue. Below that, it displays "Sorted Array:" followed by "1,1,1,2,2,2,3,3,4,5" where the numbers 1, 2, 3, and 4 are in blue. At the bottom left, the command prompt "C:\>" is visible.

```
DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX
Original Array:
2,3,2,1,1,4,2,1,3,5
Sorted Array:
1,1,1,2,2,2,3,3,4,5
C:\>
```

Activity 3: Write an assembly subroutine that will receive an array's address, its size and a key to search. If the key is found in the array, print 'found' on Screen in blinking green font. Else print 'failed' on screen in red font (no blinking).

