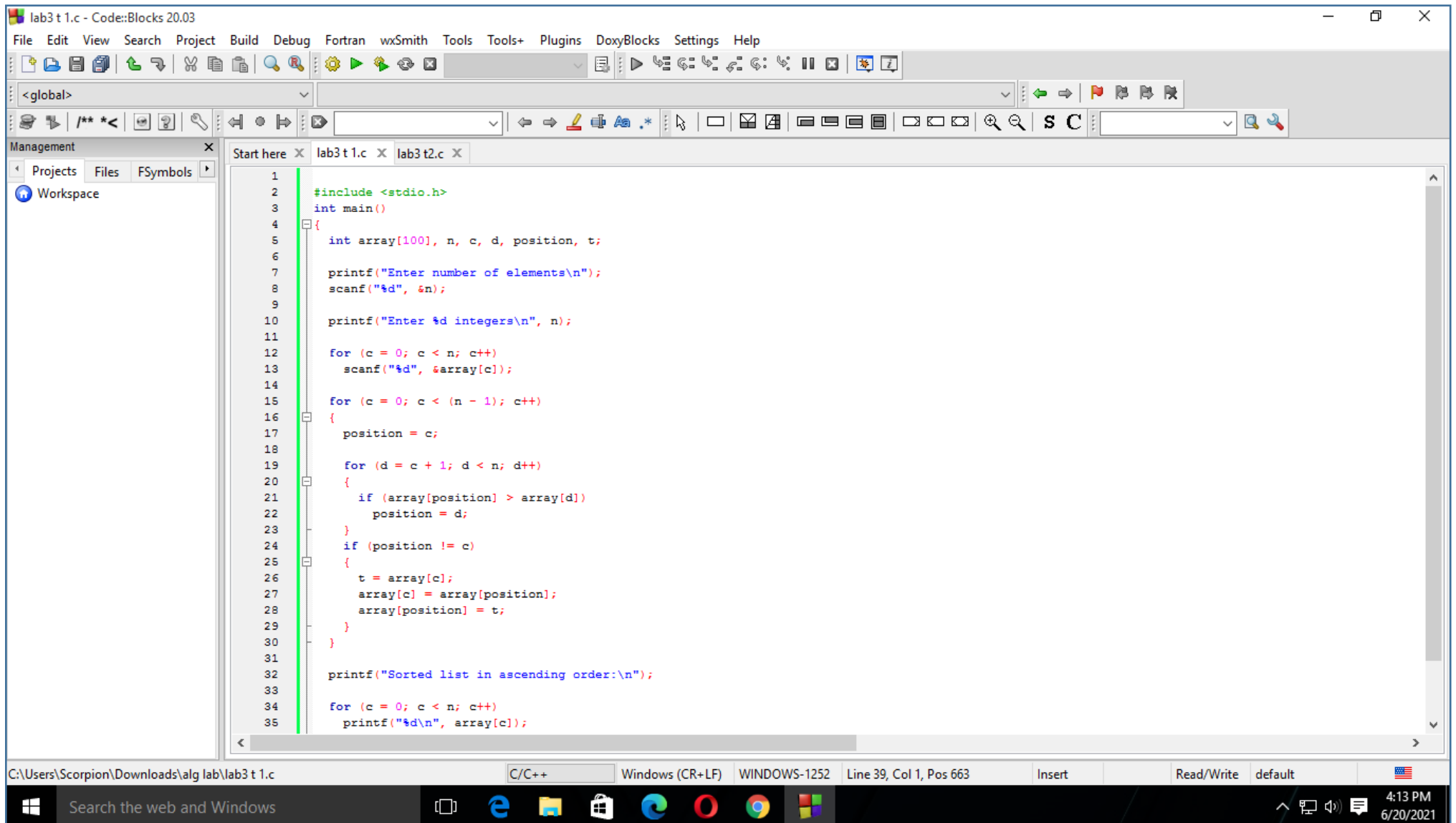


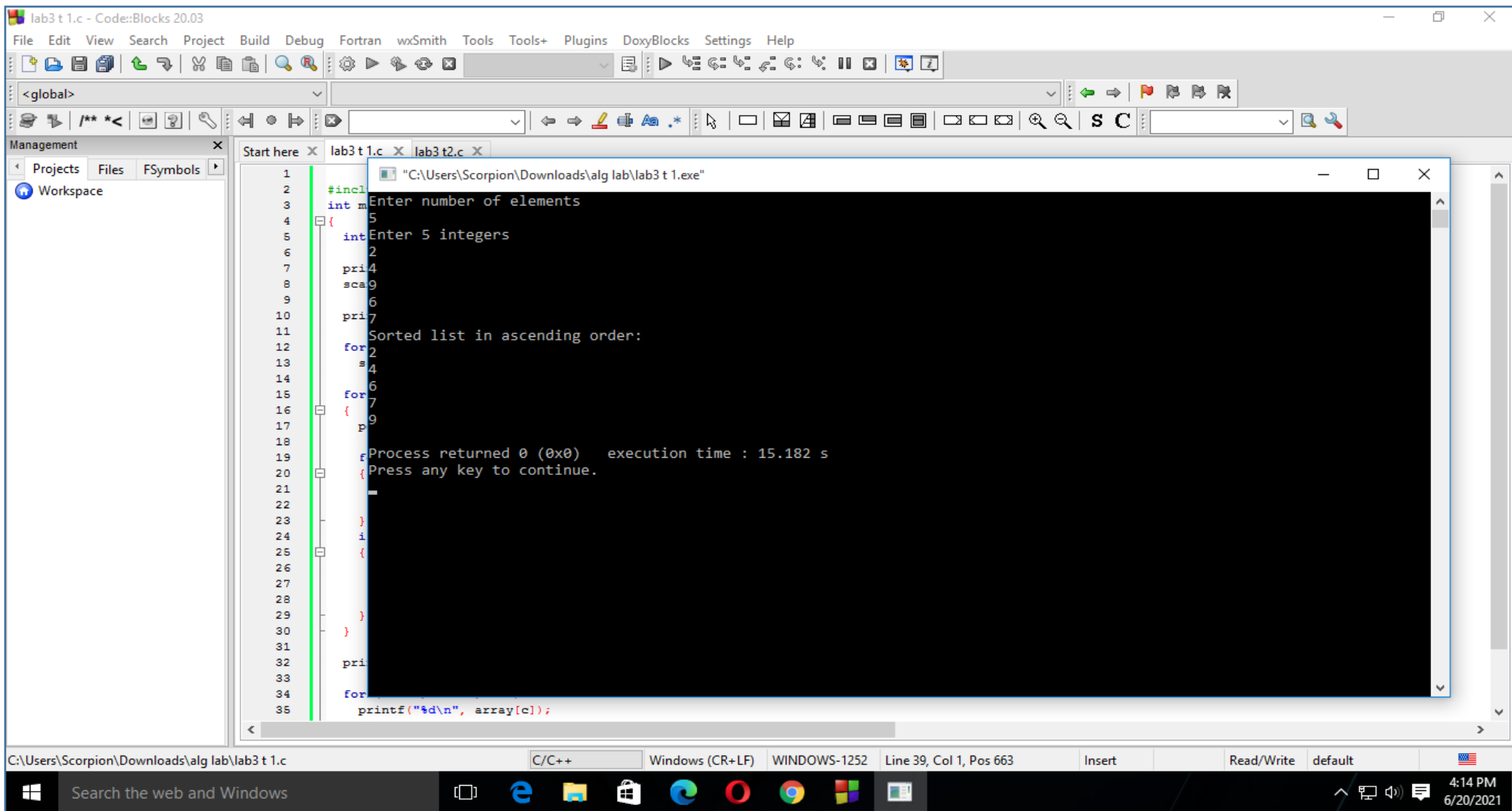
Answer to the Question no : 1



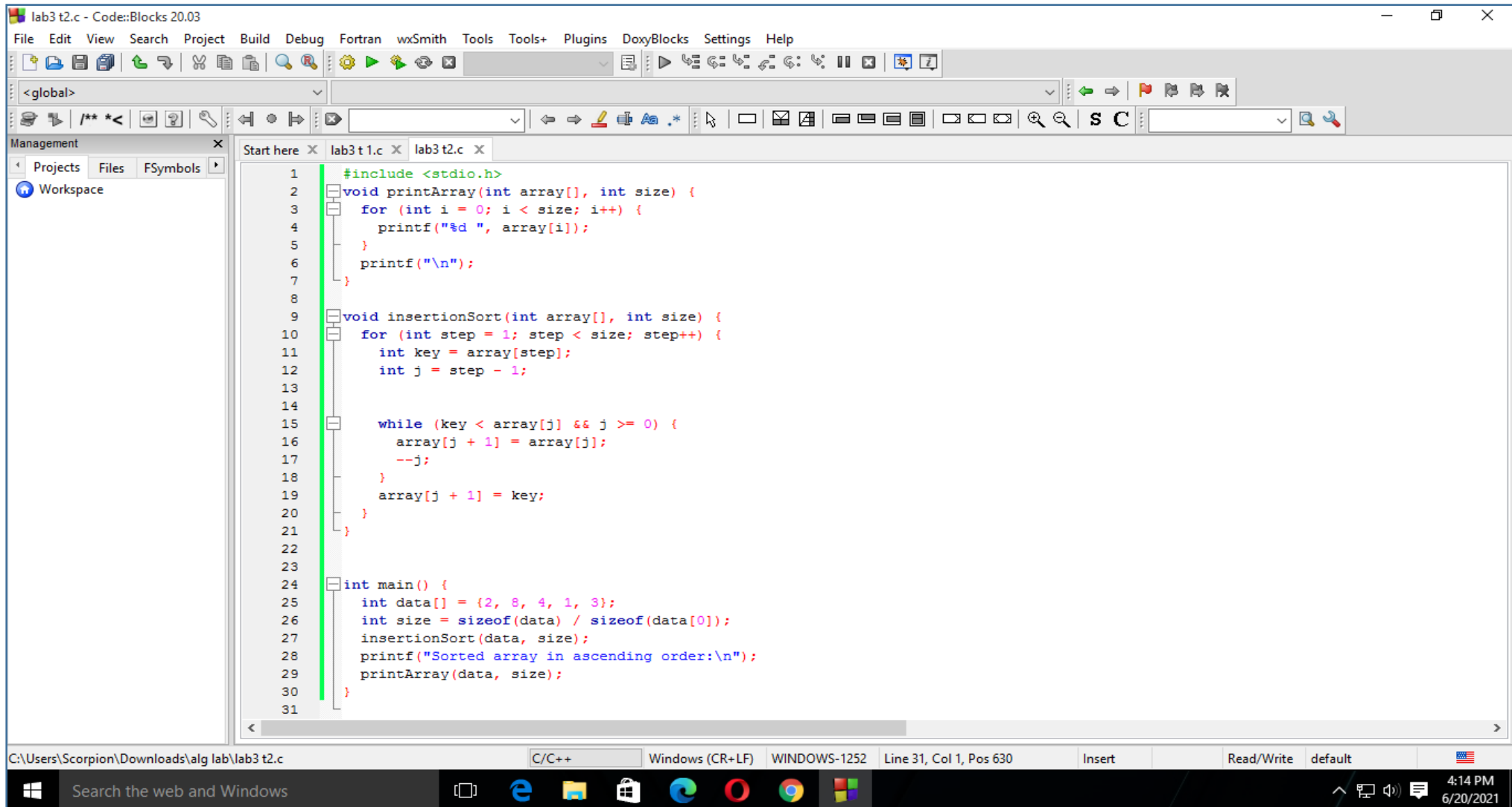
The screenshot displays the Code::Blocks IDE interface. The main editor window shows a C program for sorting an array. The program includes the `<stdio.h>` header and defines a `main` function. It declares an array of size 100 and variables `n`, `c`, `d`, `position`, and `t`. The program prompts the user to enter the number of elements and then the elements themselves. It uses a selection sort algorithm to sort the array in ascending order. The sorted array is then printed.

```
1  #include <stdio.h>
2
3  int main()
4  {
5      int array[100], n, c, d, position, t;
6
7      printf("Enter number of elements\n");
8      scanf("%d", &n);
9
10     printf("Enter %d integers\n", n);
11
12     for (c = 0; c < n; c++)
13         scanf("%d", &array[c]);
14
15     for (c = 0; c < (n - 1); c++)
16     {
17         position = c;
18
19         for (d = c + 1; d < n; d++)
20         {
21             if (array[position] > array[d])
22                 position = d;
23         }
24         if (position != c)
25         {
26             t = array[c];
27             array[c] = array[position];
28             array[position] = t;
29         }
30     }
31
32     printf("Sorted list in ascending order:\n");
33
34     for (c = 0; c < n; c++)
35         printf("%d\n", array[c]);
```

The IDE's status bar at the bottom shows the file path `C:\Users\Scorpion\Downloads\alg lab\lab3 t 1.c`, the compiler `C/C++`, the operating system `Windows (CR+LF)`, the window title `WINDOWS-1252`, the current line and column `Line 39, Col 1, Pos 663`, and the cursor mode `Insert`. The system tray at the bottom right shows the date and time `4:13 PM 6/20/2021`.



Answer to the Question no : 2



The screenshot shows the Code::Blocks IDE with a C program for insertion sort. The program includes `<stdio.h>` and defines two functions: `printArray` and `insertionSort`. The `main` function initializes an array `data` with values `{2, 8, 4, 1, 3}`, calculates its size, and calls `insertionSort` and `printArray` to display the sorted array.

```
1  #include <stdio.h>
2  void printArray(int array[], int size) {
3      for (int i = 0; i < size; i++) {
4          printf("%d ", array[i]);
5      }
6      printf("\n");
7  }
8
9  void insertionSort(int array[], int size) {
10     for (int step = 1; step < size; step++) {
11         int key = array[step];
12         int j = step - 1;
13
14         while (key < array[j] && j >= 0) {
15             array[j + 1] = array[j];
16             --j;
17         }
18         array[j + 1] = key;
19     }
20 }
21
22
23
24 int main() {
25     int data[] = {2, 8, 4, 1, 3};
26     int size = sizeof(data) / sizeof(data[0]);
27     insertionSort(data, size);
28     printf("Sorted array in ascending order:\n");
29     printArray(data, size);
30 }
31
```

The IDE interface includes a menu bar (File, Edit, View, Search, Project, Build, Debug, Fortran, wxSmith, Tools, Tools+, Plugins, DoxyBlocks, Settings, Help), a toolbar, and a sidebar with 'Management' (Projects, Files, FSymbols) and 'Workspace'. The status bar at the bottom shows the file path `C:\Users\Scorpion\Downloads\alg lab\lab3 t2.c`, the language `C/C++`, and the current position `Line 31, Col 1, Pos 630`. The Windows taskbar at the very bottom shows the time `4:14 PM` and date `6/20/2021`.

