

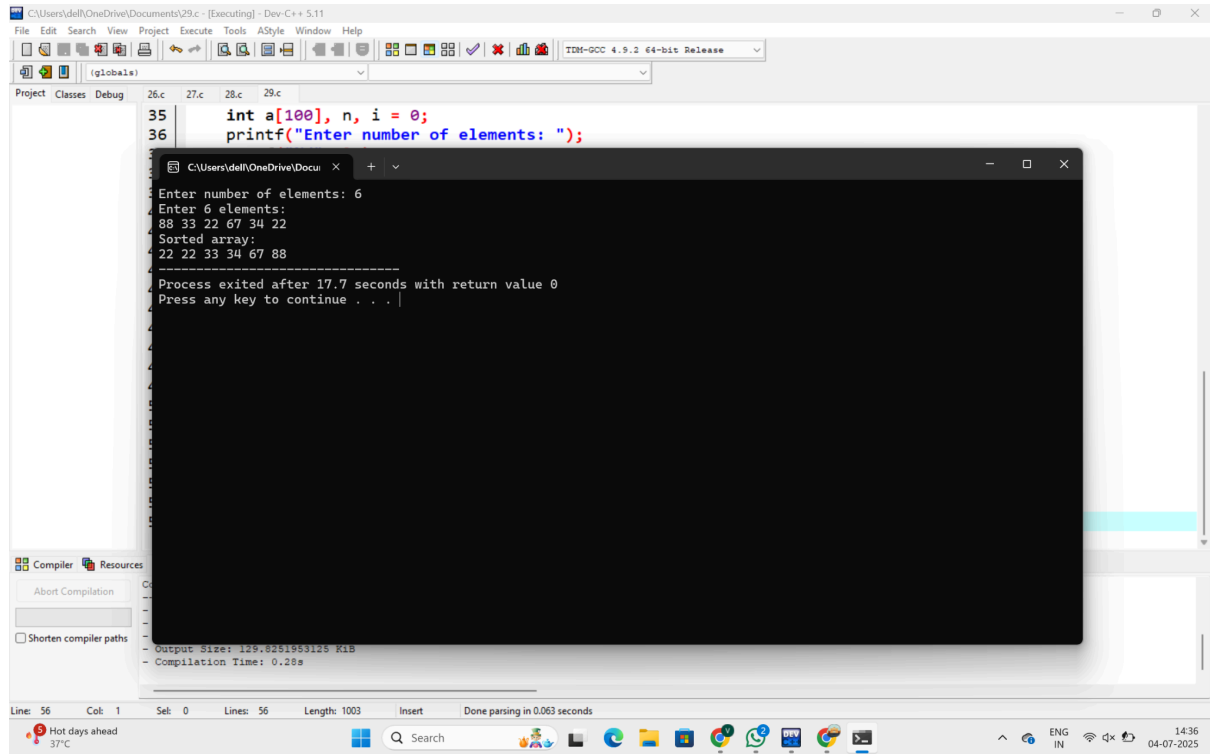
```
#include <stdio.h>
```

```
int partition(int a[], int low, int high) {  
    int pivot = a[high];  
    int i = low - 1;  
    int j = low;  
    int temp;  
  
    while (j < high) {  
        if (a[j] < pivot) {  
            i++;  
            temp = a[i];  
            a[i] = a[j];  
            a[j] = temp;  
        }  
        j++;  
    }  
  
    temp = a[i + 1];  
    a[i + 1] = a[high];  
    a[high] = temp;  
  
    return i + 1;  
}
```

```
void quickSort(int a[], int low, int high) {  
    while (low < high) {  
        int pi = partition(a, low, high);  
        quickSort(a, low, pi - 1);  
        low = pi + 1;  
    }  
}
```

```
int main() {  
    int a[100], n, i = 0;  
    printf("Enter number of elements: ");  
    scanf("%d", &n);  
  
    printf("Enter %d elements:\n", n);  
    while (i < n) {  
        scanf("%d", &a[i]);  
        i++;  
    }  
  
    quickSort(a, 0, n - 1);  
  
    printf("Sorted array:\n");  
    i = 0;
```

```
while (i < n) {  
    printf("%d ", a[i]);  
    i++;  
}  
  
return 0;  
}
```



The screenshot shows the Dev-C++ IDE with a C program being executed. The program prompts the user to enter the number of elements (6) and displays the sorted array: 22 22 33 34 67 88. The IDE interface includes a menu bar, toolbar, and a status bar at the bottom showing the current line and column.

```
35     int a[100], n, i = 0;  
36     printf("Enter number of elements: ");  
  
Enter number of elements: 6  
Enter 6 elements:  
88 33 22 67 34 22  
Sorted array:  
22 22 33 34 67 88  
-----  
Process exited after 17.7 seconds with return value 0  
Press any key to continue . . . |  
  
Compiler Resources  
Abort Compilation  
Shorten compiler paths  
Output Size: 125.8251953125 Kib  
Compilation Time: 0.28s  
Line: 56 Col: 1 Sel: 0 Lines: 56 Length: 1003 Insert Done parsing in 0.063 seconds  
Hot days ahead 37°C 14:36 04-07-2025
```