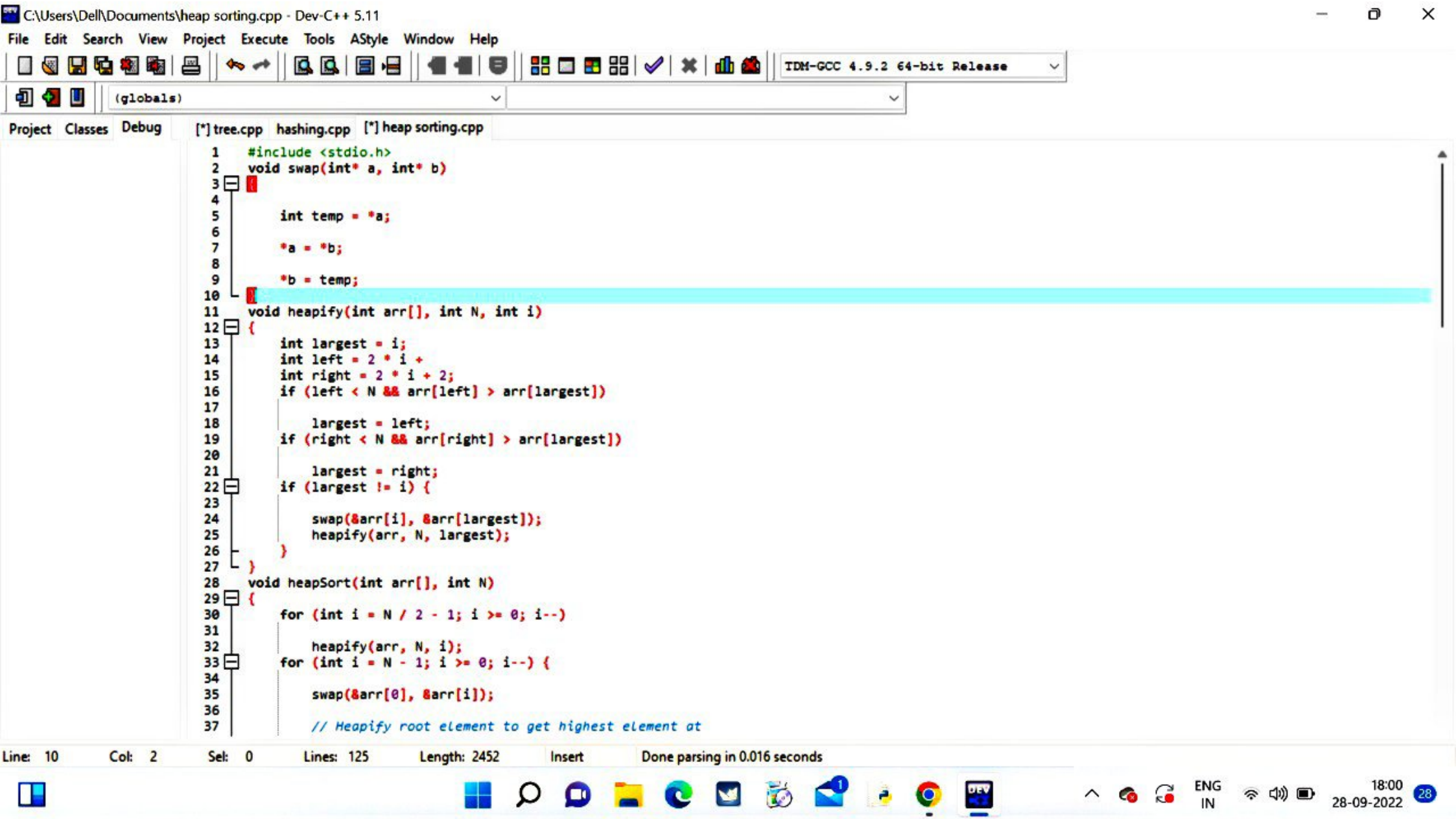
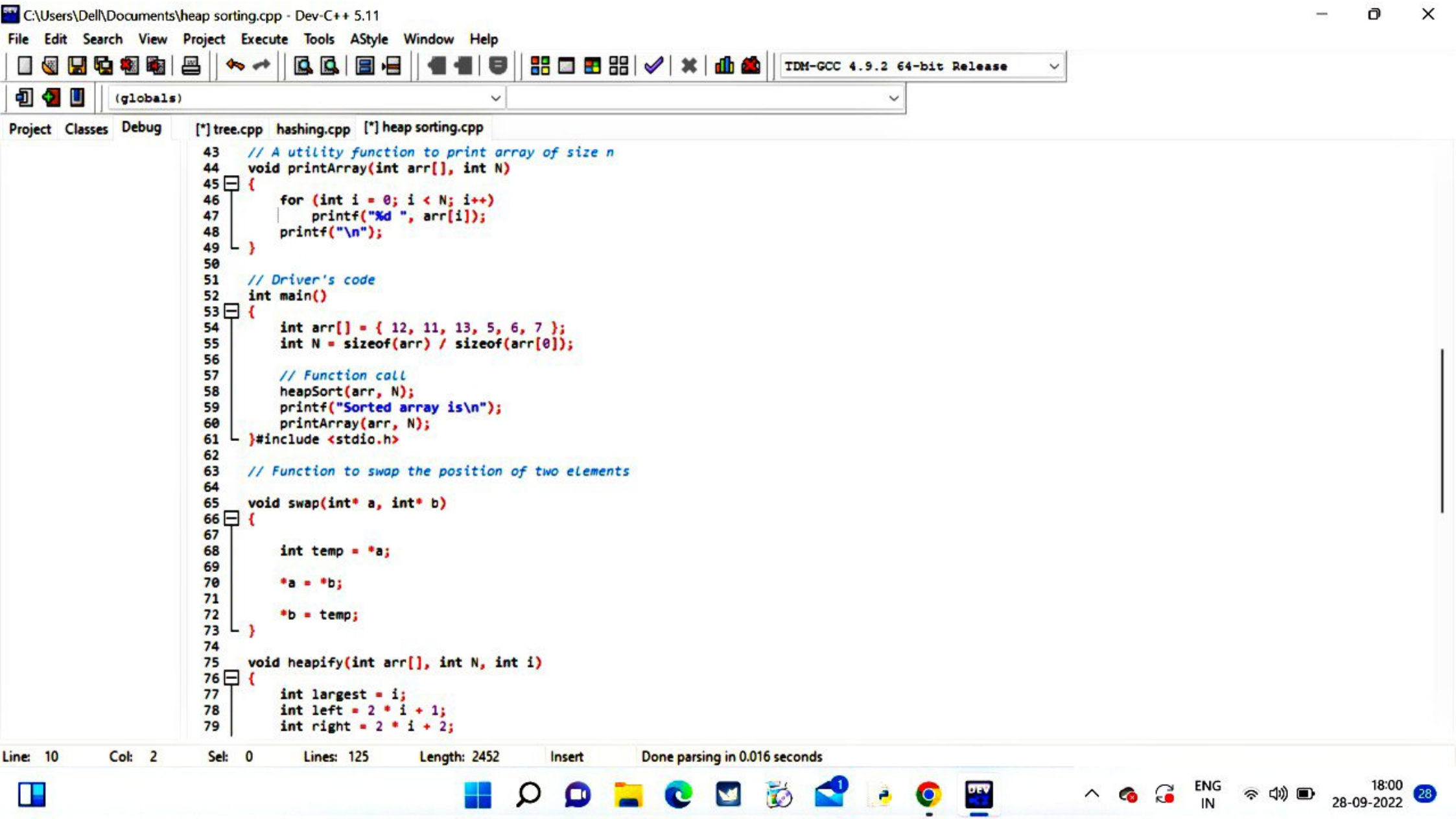

C:\Users\Dell\Documents\heap sorting.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 4.9.2 64-bit Release
(globals)
Project Classes Debug
[*] tree.cpp hashing.cpp [*] heap sorting.cpp
#include <stdio.h>
void swap(int* a, int* b)
{
int temp = *a;
*a = *b;
*b = temp;
}
void heapify(int arr[], int N, int i)
{
int largest = i;
int left = 2 * i +
int right = 2 * i + 2;
if (left < N && arr[left] > arr[largest])
largest = left;
if (right < N && arr[right] > arr[largest])
largest = right;
if (largest != i) {
swap(&arr[i], &arr[largest]);
heapify(arr, N, largest);
}
}
void heapSort(int arr[], int N)
{
for (int i = N / 2 - 1; i >= 0; i--)
heapify(arr, N, i);
for (int i = N - 1; i >= 0; i--) {
swap(&arr[0], &arr[i]);
// Heapify root element to get highest element at
Line: 10 Col: 2 Sel: 0 Lines: 125 Length: 2452 Insert Done parsing in 0.016 seconds
ENG IN
18:00 28-09-2022


C:\Users\Dell\Documents\heap sorting.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 4.9.2 64-bit Release
(globals)
Project Classes Debug
[*] tree.cpp hashing.cpp [*] heap sorting.cpp
43 // A utility function to print array of size n
44 void printArray(int arr[], int N)
45 {
46 for (int i = 0; i < N; i++)
47 printf("%d ", arr[i]);
48 printf("\n");
49 }
50
51 // Driver's code
52 int main()
53 {
54 int arr[] = { 12, 11, 13, 5, 6, 7 };
55 int N = sizeof(arr) / sizeof(arr[0]);
56
57 // Function call
58 heapSort(arr, N);
59 printf("Sorted array is\n");
60 printArray(arr, N);
61 }#include <stdio.h>
62
63 // Function to swap the position of two elements
64
65 void swap(int* a, int* b)
66 {
67
68 int temp = *a;
69
70 *a = *b;
71
72 *b = temp;
73 }
74
75 void heapify(int arr[], int N, int i)
76 {
77 int largest = i;
78 int left = 2 * i + 1;
79 int right = 2 * i + 2;
Line: 10 Col: 2 Sel: 0 Lines: 125 Length: 2452 Insert Done parsing in 0.016 seconds
ENG IN
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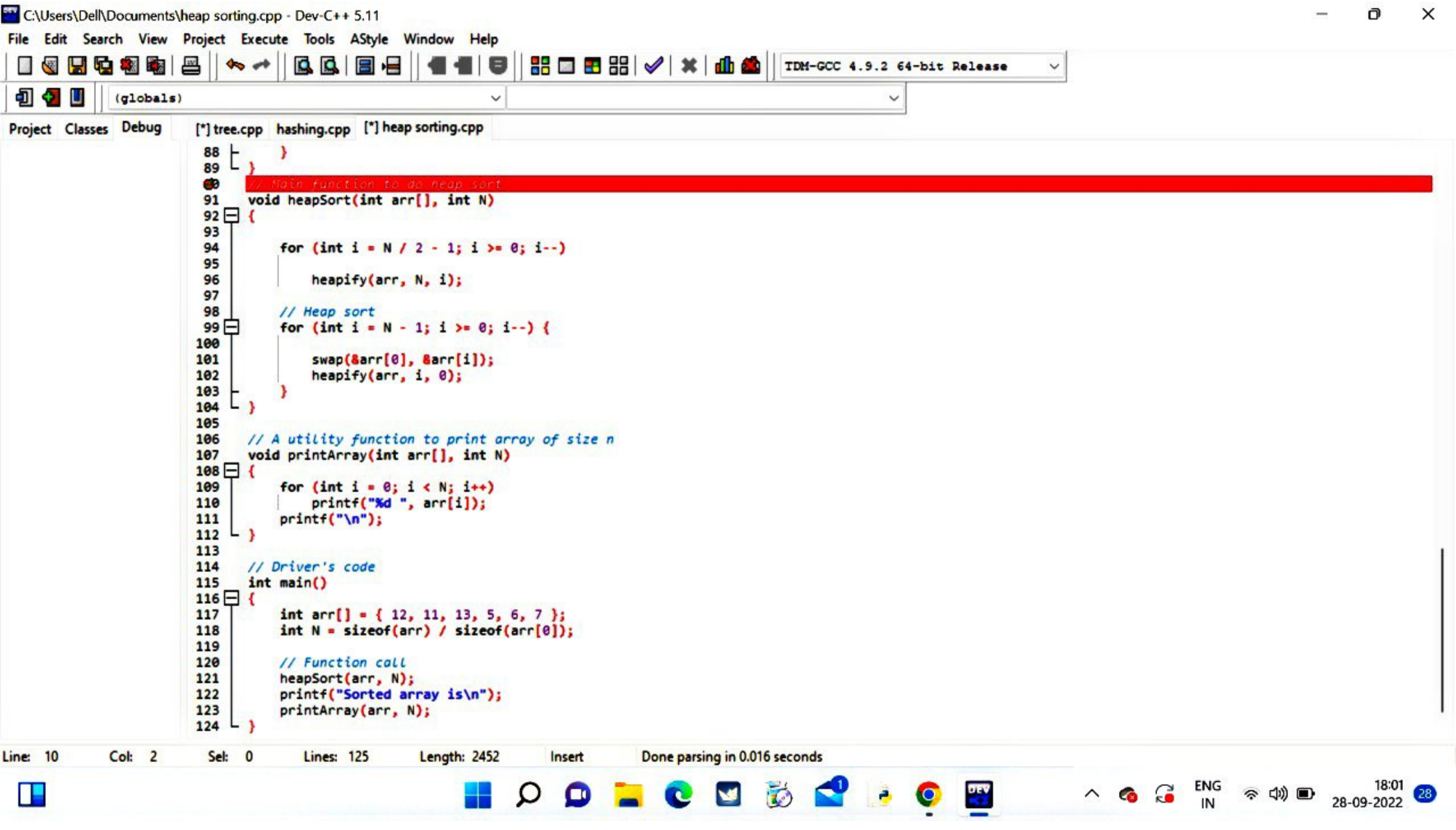
C:\Users\Dell\Documents\heap sorting.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 4.9.2 64-bit Release
(globals)
Project Classes Debug
[*] tree.cpp
hashing.cpp
[*] heap sorting.cpp
88 }
89 }
90 // Main function to do heap sort
91 void heapSort(int arr[], int N)
92 {
93
94 for (int i = N / 2 - 1; i >= 0; i--)
95
96 heapify(arr, N, i);
97
98 // Heap sort
99 for (int i = N - 1; i >= 0; i--) {
100
101 swap(&arr[0], &arr[i]);
102 heapify(arr, i, 0);
103 }
104 }
105
106 // A utility function to print array of size n
107 void printArray(int arr[], int N)
108 {
109 for (int i = 0; i < N; i++)
110 printf("%d ", arr[i]);
111 printf("\n");
112 }
113
114 // Driver's code
115 int main()
116 {
117 int arr[] = { 12, 11, 13, 5, 6, 7 };
118 int N = sizeof(arr) / sizeof(arr[0]);
119
120 // Function call
121 heapSort(arr, N);
122 printf("Sorted array is\n");
123 printArray(arr, N);
124 }
Line: 10 Col: 2 Sel: 0 Lines: 125 Length: 2452 Insert Done parsing in 0.016 seconds
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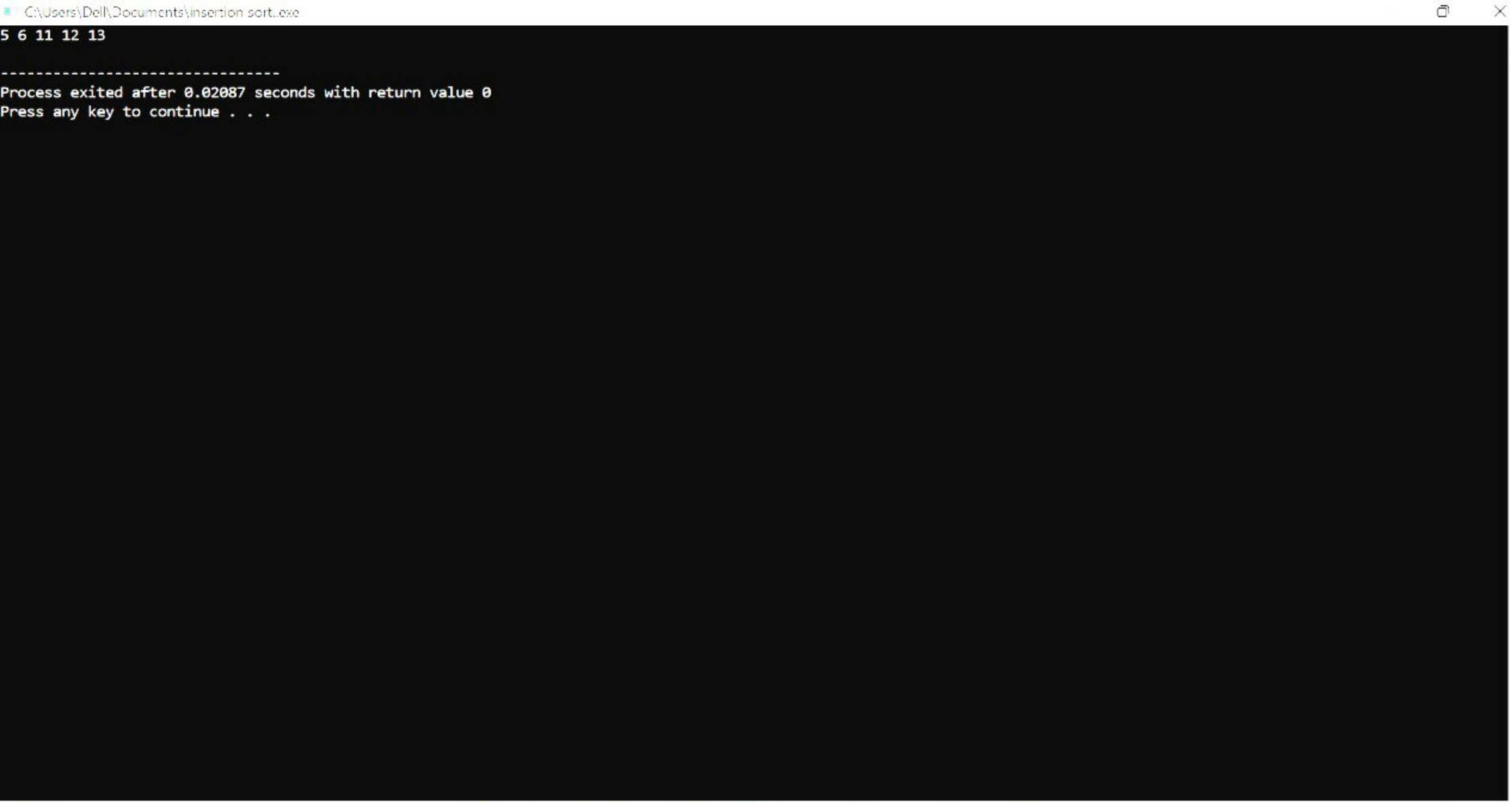
28


C:\Users\Dell\Documents\insertion sort.exe
5 6 11 12 13

Process exited after 0.02087 seconds with return value 0
Press any key to continue . . .