LAB#4

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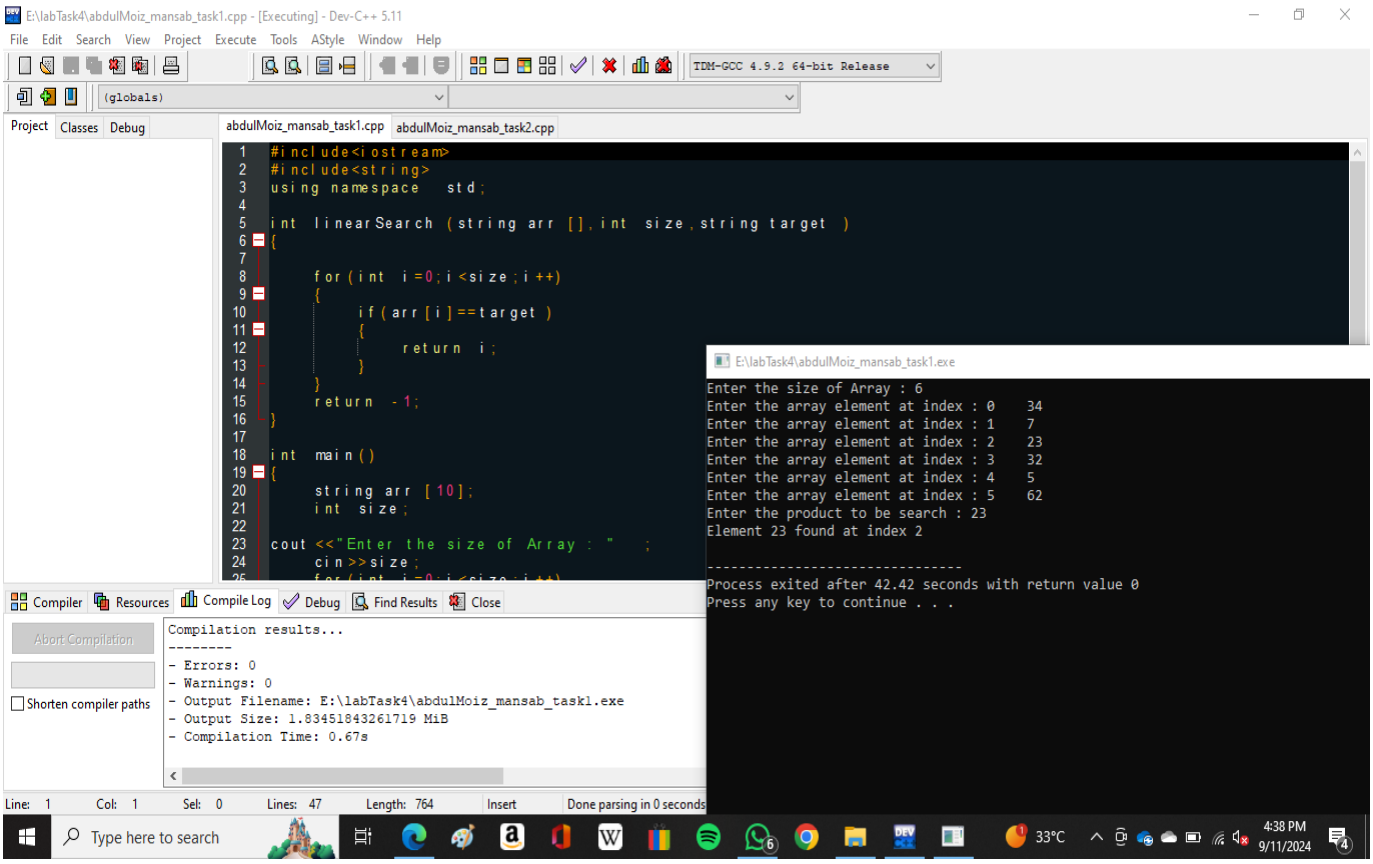
Course: Data Structure And Algorithem

Submitted To: Mr. Shahzad Ahmed Khan

TASK#1

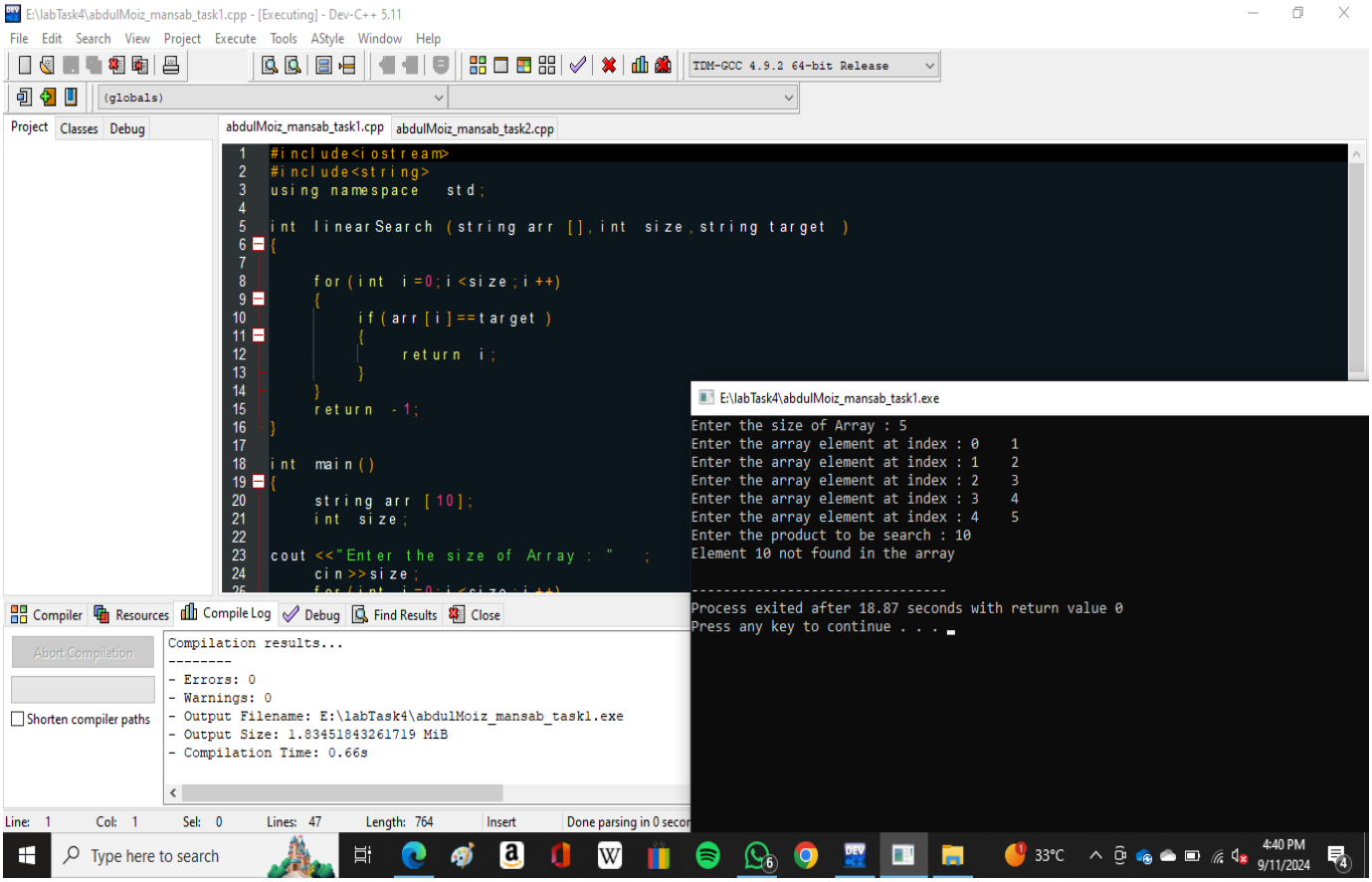
CASE 1:


E:\labTask4\abdulMoiz_mansab_task1.cpp - [Executing] - 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
abdulMoiz_mansab_task1.cpp
abdulMoiz_mansab_task2.cpp
#include<iostream>
#include<string>
using namespace std;
int linearSearch (string arr [],int size,string target)
{
for(int i=0;i<size;i++)
{
if(arr[i]==target)
{
return i;
}
}
return -1;
}
int main()
{
string arr [10];
int size;
cout <<"Enter the size of Array : " ;
cin>>size;
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: E:\labTask4\abdulMoiz_mansab_task1.exe
- Output Size: 1.83451843261719 MiB
- Compilation Time: 0.67s
Line: 1 Col: 1 Sel: 0 Lines: 47 Length: 764 Insert Done parsing in 0 seconds
E:\labTask4\abdulMoiz_mansab_task1.exe
Enter the size of Array : 6
Enter the array element at index : 0 34
Enter the array element at index : 1 7
Enter the array element at index : 2 23
Enter the array element at index : 3 32
Enter the array element at index : 4 5
Enter the array element at index : 5 62
Enter the product to be search : 23
Element 23 found at index 2

Process exited after 42.42 seconds with return value 0
Press any key to continue . . .
Type here to search
33°C
4:38 PM
9/11/2024

CASE 2:


E:\labTask4\abdulMoiz_mansab_task1.cpp - [Executing] - 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
abdulMoiz_mansab_task1.cpp abdulMoiz_mansab_task2.cpp
#include<iostream>
#include<string>
using namespace std;
int linearSearch (string arr [],int size,string target)
{
for(int i=0;i<size;i++)
{
if(arr[i]==target)
{
return i;
}
}
return -1;
}
int main()
{
string arr [10];
int size;
cout <<"Enter the size of Array : " ;
cin>>size;
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: E:\labTask4\abdulMoiz_mansab_task1.exe
- Output Size: 1.83451843261719 MiB
- Compilation Time: 0.66s
Line: 1 Col: 1 Sel: 0 Lines: 47 Length: 764 Insert Done parsing in 0 secon
E:\labTask4\abdulMoiz_mansab_task1.exe
Enter the size of Array : 5
Enter the array element at index : 0 1
Enter the array element at index : 1 2
Enter the array element at index : 2 3
Enter the array element at index : 3 4
Enter the array element at index : 4 5
Enter the product to be search : 10
Element 10 not found in the array
Process exited after 18.87 seconds with return value 0
Press any key to continue . . .
Type here to search
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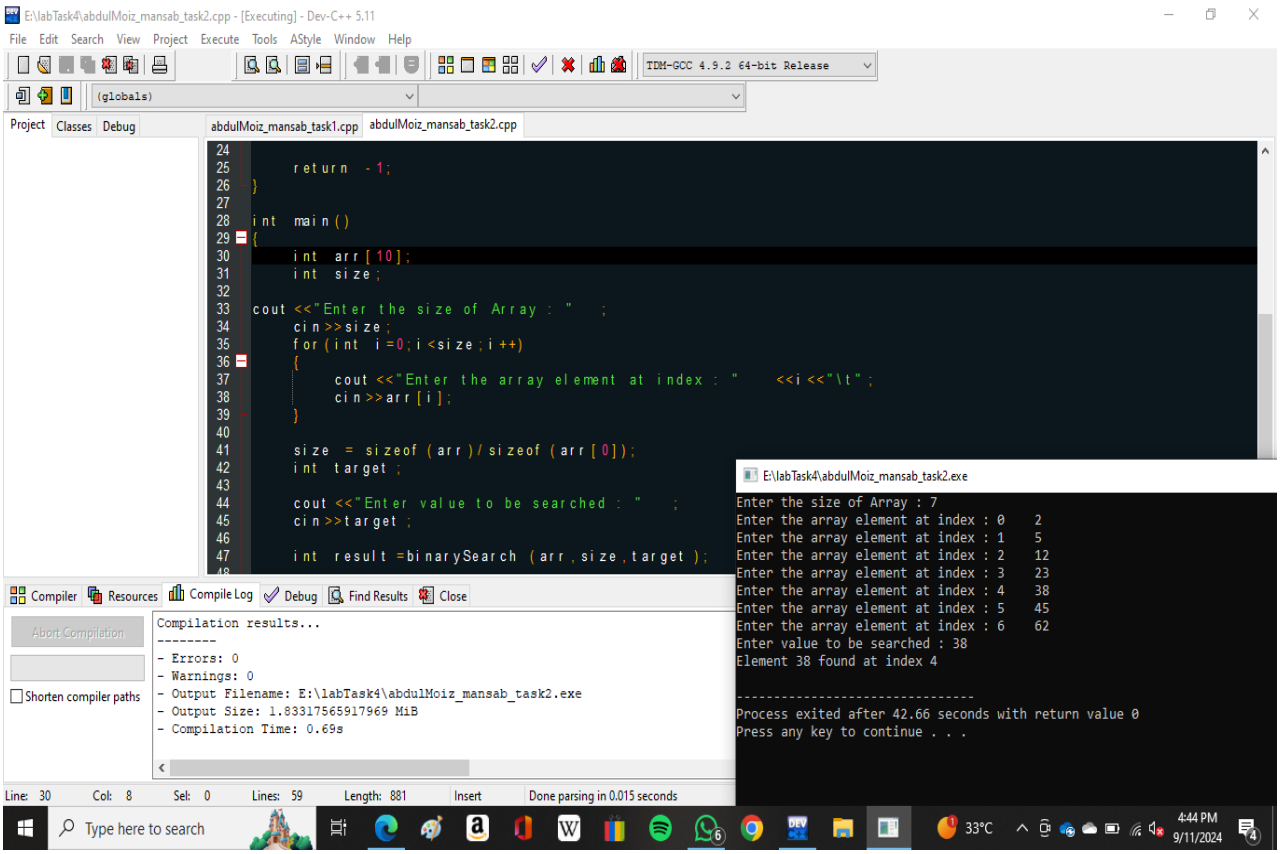
9/11/2024

TASK#2

CASE 1:


E:\labTask4\abdulMoiz_mansab_task2.cpp - [Executing] - 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
abdulMoiz_mansab_task1.cpp
abdulMoiz_mansab_task2.cpp
return -1;
}
int main()
{
int arr[10];
int size;
cout <<"Enter the size of Array : " ;
cin >>size;
for(int i=0;i<size;i++)
{
cout <<"Enter the array element at index : " <<i<<"\t";
cin >>arr[i];
}
size = sizeof(arr)/sizeof(arr[0]);
int target;
cout <<"Enter value to be searched : " ;
cin >>target;
int result =binarySearch (arr,size,target);
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: E:\labTask4\abdulMoiz_mansab_task2.exe
- Output Size: 1.83317565917969 MiB
- Compilation Time: 0.69s
Line: 30 Col: 8 Sel: 0 Lines: 59 Length: 881 Insert Done parsing in 0.015 seconds
E:\labTask4\abdulMoiz_mansab_task2.exe
Enter the size of Array : 7
Enter the array element at index : 0 2
Enter the array element at index : 1 5
Enter the array element at index : 2 12
Enter the array element at index : 3 23
Enter the array element at index : 4 38
Enter the array element at index : 5 45
Enter the array element at index : 6 62
Enter value to be searched : 38
Element 38 found at index 4
Process exited after 42.66 seconds with return value 0
Press any key to continue . . .
Type here to search
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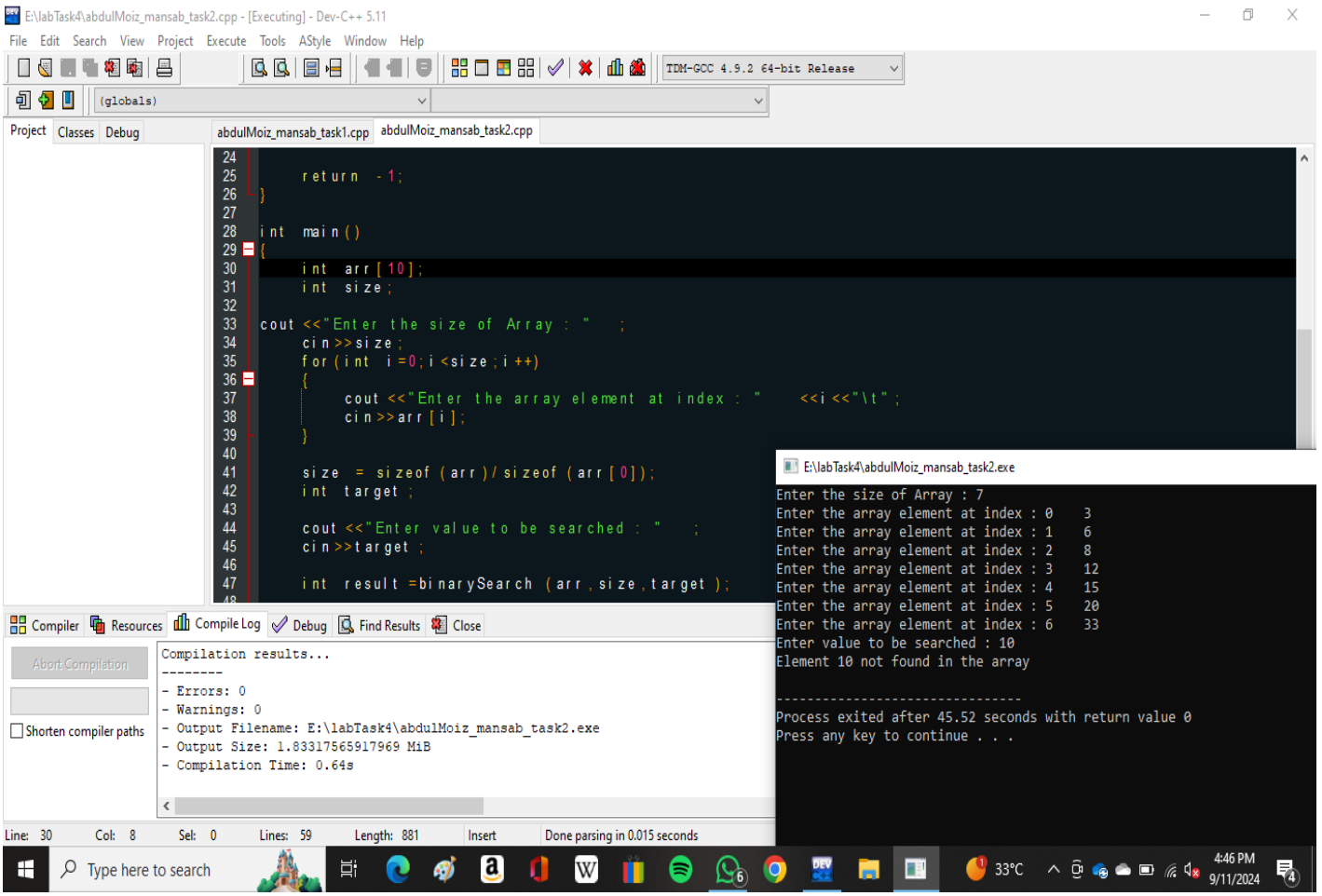
CASE 2:


E:\labTask4\abdulMoiz_mansab_task2.cpp - [Executing] - 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
abdulMoiz_mansab_task1.cpp abdulMoiz_mansab_task2.cpp
return -1;
}
int main()
{
int arr[10];
int size;
cout <<"Enter the size of Array : " ;
cin>>size;
for(int i=0;i<size;i++)
{
cout <<"Enter the array element at index : " <<i <<"\t";
cin>>arr[i];
}
size = sizeof(arr)/sizeof(arr[0]);
int target;
cout <<"Enter value to be searched : " ;
cin>>target;
int result =binarySearch(arr,size,target);
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: E:\labTask4\abdulMoiz_mansab_task2.exe
- Output Size: 1.83317565917969 MiB
- Compilation Time: 0.64s
Line: 30 Col: 8 Sel: 0 Lines: 59 Length: 881 Insert Done parsing in 0.015 seconds
E:\labTask4\abdulMoiz_mansab_task2.exe
Enter the size of Array : 7
Enter the array element at index : 0 3
Enter the array element at index : 1 6
Enter the array element at index : 2 8
Enter the array element at index : 3 12
Enter the array element at index : 4 15
Enter the array element at index : 5 20
Enter the array element at index : 6 33
Enter value to be searched : 10
Element 10 not found in the array

Process exited after 45.52 seconds with return value 0
Press any key to continue . . .
Type here to search
33°C
4:46 PM
9/11/2024