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subject data structure.

semester 8th

Department BE(E)

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Global Scope)

main()

```
#include<iostream>
using namespace std;
int linearSearch(char array[], int size, char searchValue)
{
    for (int i=0; i<size; i++)
    {
        if (searchValue == array[i])
        {
            return i;
        }
    }
    return -1;
}
void main()
{
    char b[] = {'s','u','g','a','z','e','y'};
    char userValue;
    cout<<"Enter a character: " <<endl<<endl<<endl;
    cin>> userValue;
    char result = linearSearch(b,7,userValue);
    if(result >= 0)
    {
        cout<<"Element " << b[result] << " is found successfully " <<endl<<endl<<endl;
    }
    else
    {
        cout<<"Search is Unsuccessful " << endl<<endl<<endl;
    }
}
```

Enter a character:

g
Element g is found successfully

Press any key to continue . . .

C:\

C:\Windows\system32\cmd.exe



Enter a character:

m
Search is Unsuccessful

Press any key to continue . . .

C:\Users\IMRAN KHAN\Desktop\Untitled2.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

Untitled2.cpp

```
1  #include <iostream>
2  using namespace std;
3
4  int insertSorted(int arr[], int n, int key, int capacity)
5  (
6
7      if (n >= capacity)
8          return n;
9
10     int i;
11     for (i = n - 1; (i >= 0 && arr[i] > key); i--)
12         arr[i + 1] = arr[i];
13
14     arr[i + 1] = key;
15
16     return (n + 1);
17 )
18
19 int main()
20 (
21     int arr[20] = { 15, 10, 12, 11, 9, 10 };
22     int capacity = sizeof(arr) / sizeof(arr[0]);
23     int n = 6;
24     int i, key = 26;
25
26     cout << "\nBefore Insertion: ";
27     for (i = 0; i < n; i++)
28         cout << arr[i] << " ";
29
```

Compiler Resources Compile Log Debug Find Results Close

Abort Compilation

```
- Warnings: 0
- Output Filename: C:\Users\IMRAN KHAN\Desktop\Untitled2.exe
- Output Size: 1.83296585083008 MiB
- Compilation Time: 1.88s
```

Shorten compiler paths

Activate Windows
Go to Settings to activate Windows.

Line: 18 Col: 1 Sel: 0 Lines: 38 Length: 781 Insert Done parsing in 0.016 seconds



1:43 AM
7/2/2020

C:\Users\IMRAN KHAN\Desktop\Untitled3.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

Untitled3.cpp

```
11     for (i = n - 1; (i >= 0 && arr[i] > key); i--)
12         arr[i + 1] = arr[i];
13
14     arr[i + 1] = key;
15
16     return (n + 1);
17 }
18
19 int main()
20 {
21     int arr[20] = { 15, 10, 12, 11, 9, 10 };
22     int capacity = sizeof(arr) / sizeof(arr[0]);
23     int n = 6;
24     int i, key = 6;
25
26     cout << "\nBefore Insertion: ";
27     for (i = 0; i < n; i++)
28         cout << arr[i] << " ";
29
30     // Inserting key
31     n = insertSorted(arr, n, key, capacity);
32
33     cout << "\nAfter Insertion: ";
34     for (i = 0; i < n; i++)
35         cout << arr[i] << " ";
36
37     return 0;
38 }
```

Compiler Resources Compile Log Debug Find Results Close

Abort Compilation

- Warnings: 0
- Output Filename: C:\Users\IMRAN KHAN\Desktop\Untitled3.exe
- Output Size: 1.83296585083008 MiB
- Compilation Time: 2.92s

Shorten compiler paths

Activate Windows
Go to Settings to activate Windows.

Line: 24 Col: 1 Sel: 20 Lines: 38 Length: 780 Insert Done parsing in 0.032 seconds

C:\Users\IMRAN KHAN\Desktop\Untitled3.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

```
11     for (i = n - 1; (i >= 0 && arr[i] > key); i--)
12         arr[i + 1] = arr[i];
```

C:\Users\IMRAN KHAN\Desktop\Untitled3.exe

```
Before Insertion: 15 10 12 11 9 10
After Insertion: 6 15 10 12 11 9 10
-----
Process exited after 0.104 seconds with return value 0
Press any key to continue . . .
```

Compiler Resources

About Compilation

Shorten compiler paths

Line: 24 Col: 18 Sel: 0 Lines: 38 Length: 780 Insert Done parsing in 0.032 seconds

Activate Windows
Go to Settings to activate Windows.