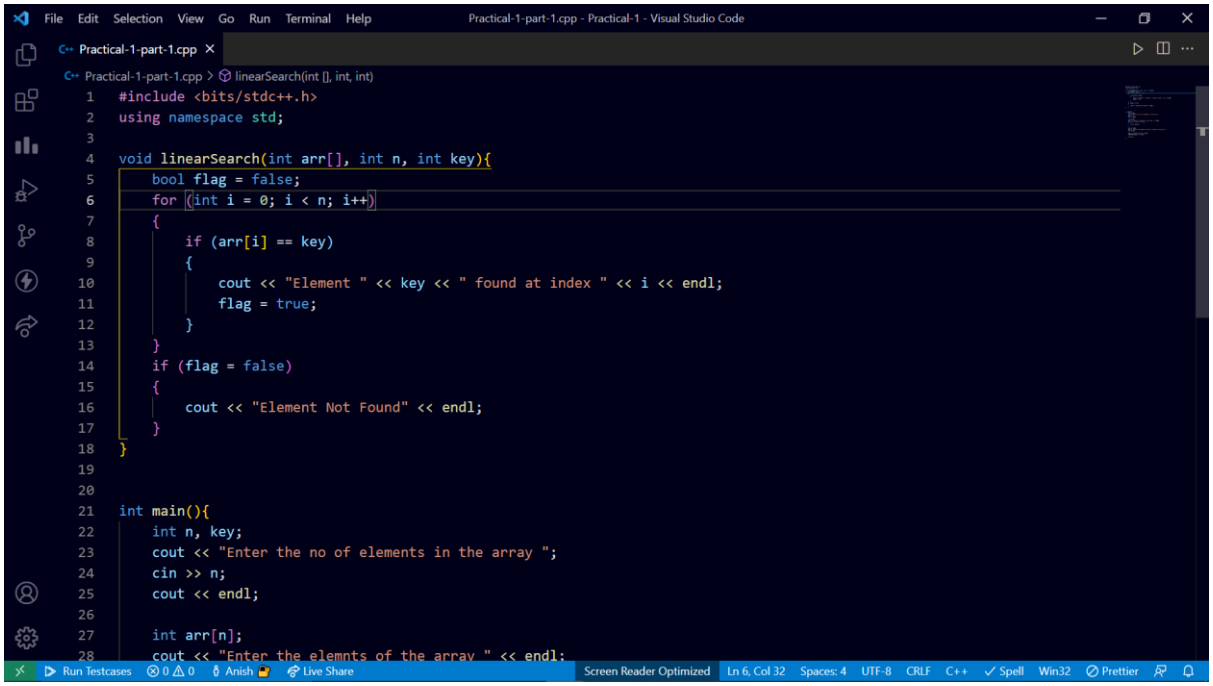
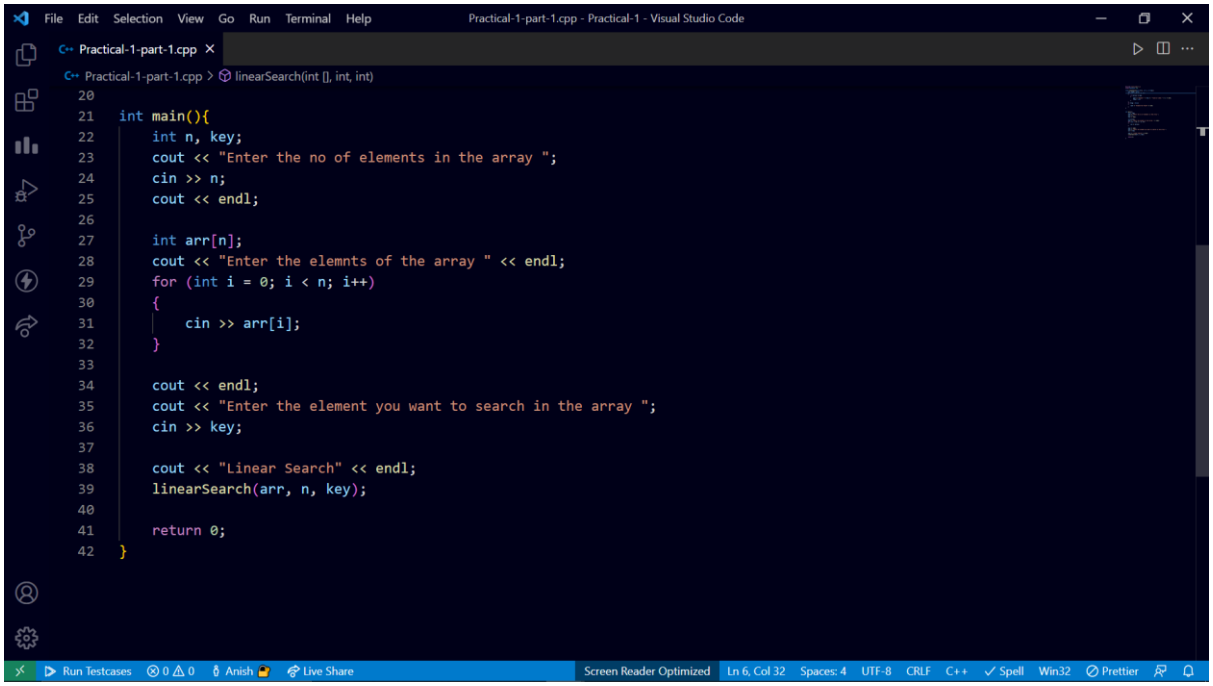
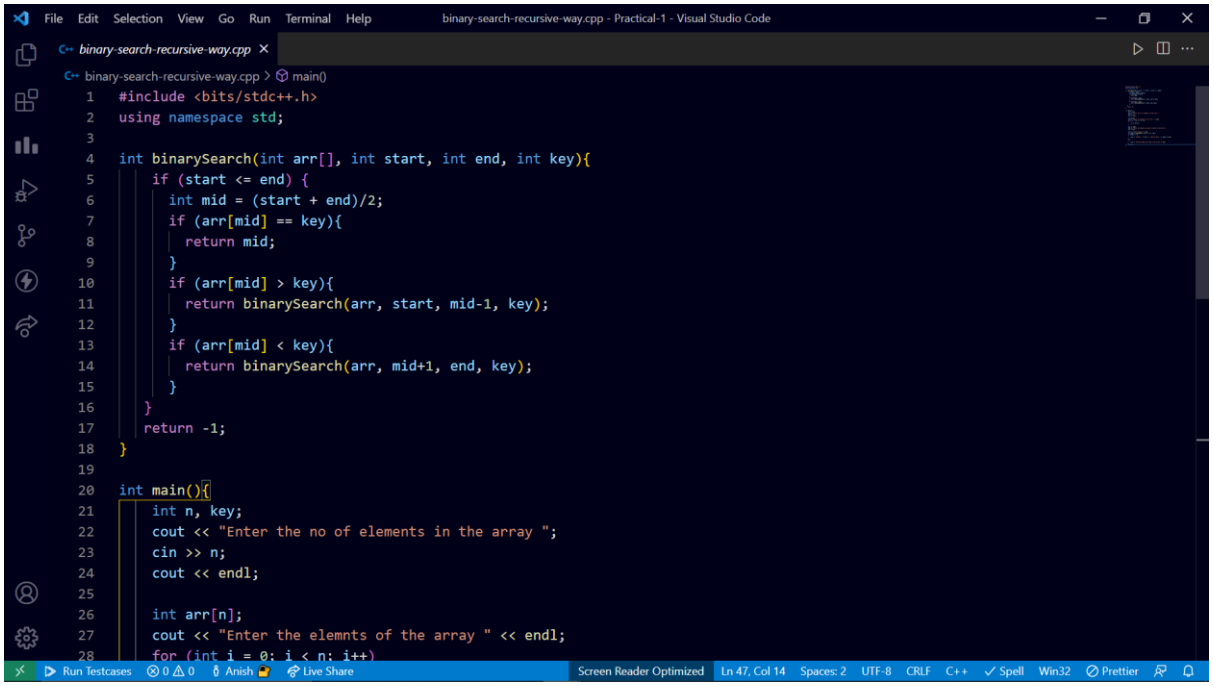

File Edit Selection View Go Run Terminal Help
Practical-1-part-1.cpp - Practical-1 - Visual Studio Code
Practical-1-part-1.cpp
Practical-1-part-1.cpp > linearSearch(int [], int, int)
#include <bits/stdc++.h>
using namespace std;
void linearSearch(int arr[], int n, int key){
bool flag = false;
for (int i = 0; i < n; i++)
{
if (arr[i] == key)
{
cout << "Element " << key << " found at index " << i << endl;
flag = true;
}
}
if (flag = false)
{
cout << "Element Not Found" << endl;
}
}
int main(){
int n, key;
cout << "Enter the no of elements in the array ";
cin >> n;
cout << endl;
int arr[n];
cout << "Enter the elemnts of the array " << endl;
Run Testcases
Anish
Live Share
Screen Reader Optimized
Ln 6, Col 32
Spaces: 4
UTF-8
CRLF
C++
Spell
Win32
Prettier

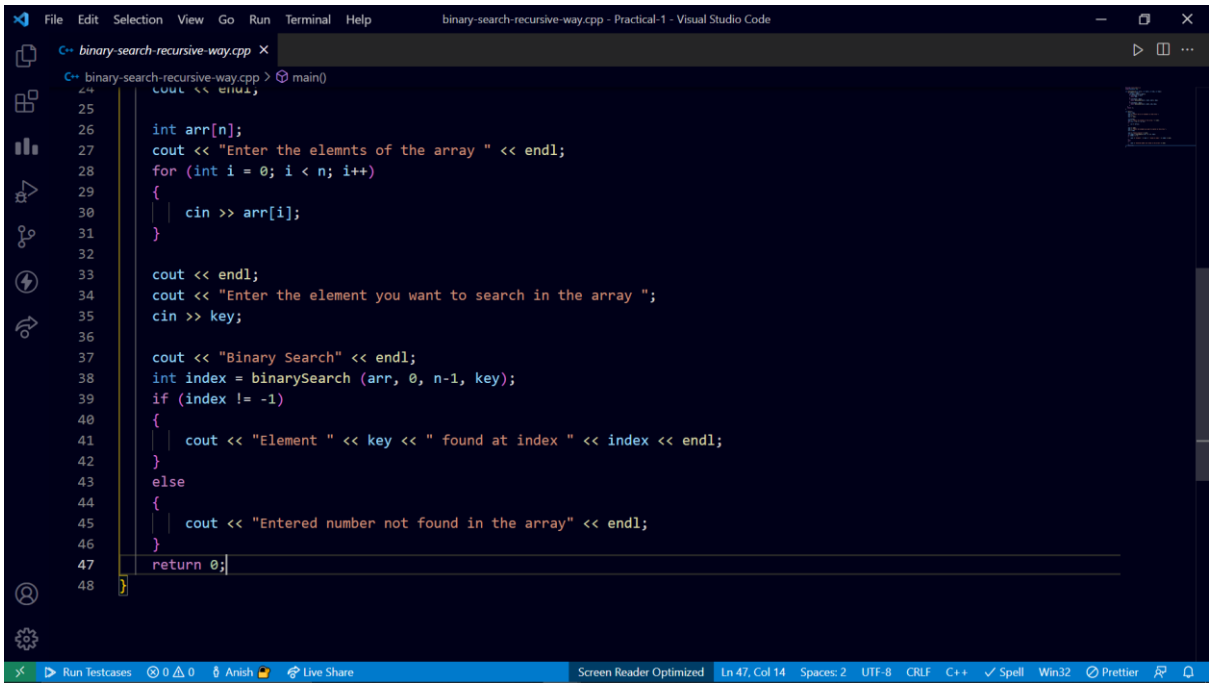

File Edit Selection View Go Run Terminal Help
Practical-1-part-1.cpp - Practical-1 - Visual Studio Code
Practical-1-part-1.cpp
Practical-1-part-1.cpp > linearSearch(int [], int, int)
int main(){
int n, key;
cout << "Enter the no of elements in the array ";
cin >> n;
cout << endl;
int arr[n];
cout << "Enter the elemnts of the array " << endl;
for (int i = 0; i < n; i++)
{
cin >> arr[i];
}
cout << endl;
cout << "Enter the element you want to search in the array ";
cin >> key;
cout << "Linear Search" << endl;
linearSearch(arr, n, key);
return 0;
}
Run Testcases
Anish
Live Share
Screen Reader Optimized
Ln 6, Col 32
Spaces: 4
UTF-8
CRLF
C++
Spell
Win32
Prettier

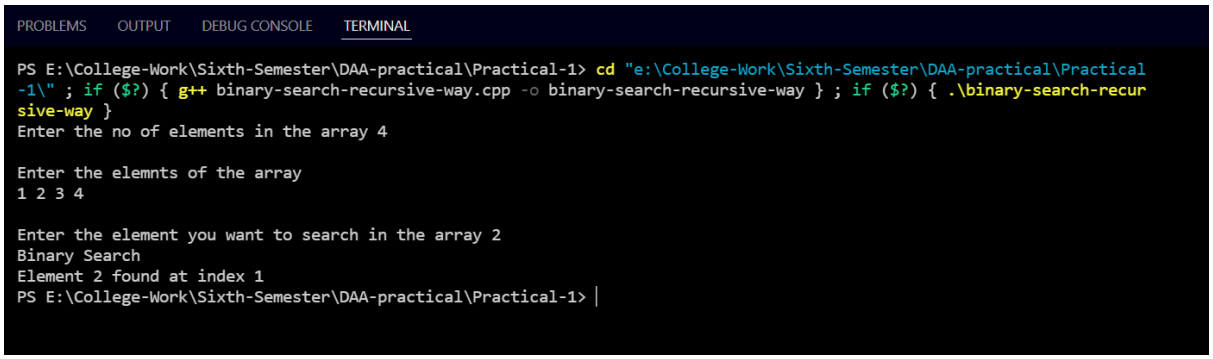
```
Element 2 found at index 1
PS E:\College-Work\Sixth-Semester\DAA-practical\Practical-1> cd "e:\College-Work\Sixth-Semester\DAA-practical\Practical-1\" ; if ($?) { g++ Pract
ical-1-part-1.cpp -o Practical-1-part-1 } ; if ($?) { .\Practical-1-part-1 }
Enter the no of elements in the array 5

Enter the elemnts of the array
4 7 1 9 2

Enter the element you want to search in the array 9
Linear Search
Element 9 found at index 3
PS E:\College-Work\Sixth-Semester\DAA-practical\Practical-1>
```


File Edit Selection View Go Run Terminal Help
binary-search-recursive-way.cpp - Practical-1 - Visual Studio Code
binary-search-recursive-way.cpp
binary-search-recursive-way.cpp > main()
#include <bits/stdc++.h>
using namespace std;
int binarySearch(int arr[], int start, int end, int key){
if (start <= end) {
int mid = (start + end)/2;
if (arr[mid] == key){
return mid;
}
if (arr[mid] > key){
return binarySearch(arr, start, mid-1, key);
}
if (arr[mid] < key){
return binarySearch(arr, mid+1, end, key);
}
}
return -1;
}
int main(){
int n, key;
cout << "Enter the no of elements in the array ";
cin >> n;
cout << endl;
int arr[n];
cout << "Enter the elemnts of the array " << endl;
for (int i = 0; i < n; i++)
Run Testcases 0 0 Anish Live Share
Screen Reader Optimized Ln 47, Col 14 Spaces: 2 UTF-8 CRLF C++ Spell Win32 Prettier


File Edit Selection View Go Run Terminal Help
binary-search-recursive-way.cpp - Practical-1 - Visual Studio Code
binary-search-recursive-way.cpp
binary-search-recursive-way.cpp > main()
int arr[n];
cout << "Enter the elemnts of the array " << endl;
for (int i = 0; i < n; i++)
{
cin >> arr[i];
}
cout << endl;
cout << "Enter the element you want to search in the array ";
cin >> key;
cout << "Binary Search" << endl;
int index = binarySearch (arr, 0, n-1, key);
if (index != -1)
{
cout << "Element " << key << " found at index " << index << endl;
}
else
{
cout << "Entered number not found in the array" << endl;
}
return 0;
}
Run Testcases 0 0 Anish Live Share
Screen Reader Optimized Ln 47, Col 14 Spaces: 2 UTF-8 CRLF C++ Spell Win32 Prettier


PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PS E:\College-Work\Sixth-Semester\DAA-practical\Practical-1> cd "e:\College-Work\Sixth-Semester\DAA-practical\Practical-1\" ; if ($?) { g++ binary-search-recursive-way.cpp -o binary-search-recursive-way } ; if ($?) { .\binary-search-recursive-way }
Enter the no of elements in the array 4
Enter the elemnts of the array
1 2 3 4
Enter the element you want to search in the array 2
Binary Search
Element 2 found at index 1
PS E:\College-Work\Sixth-Semester\DAA-practical\Practical-1>