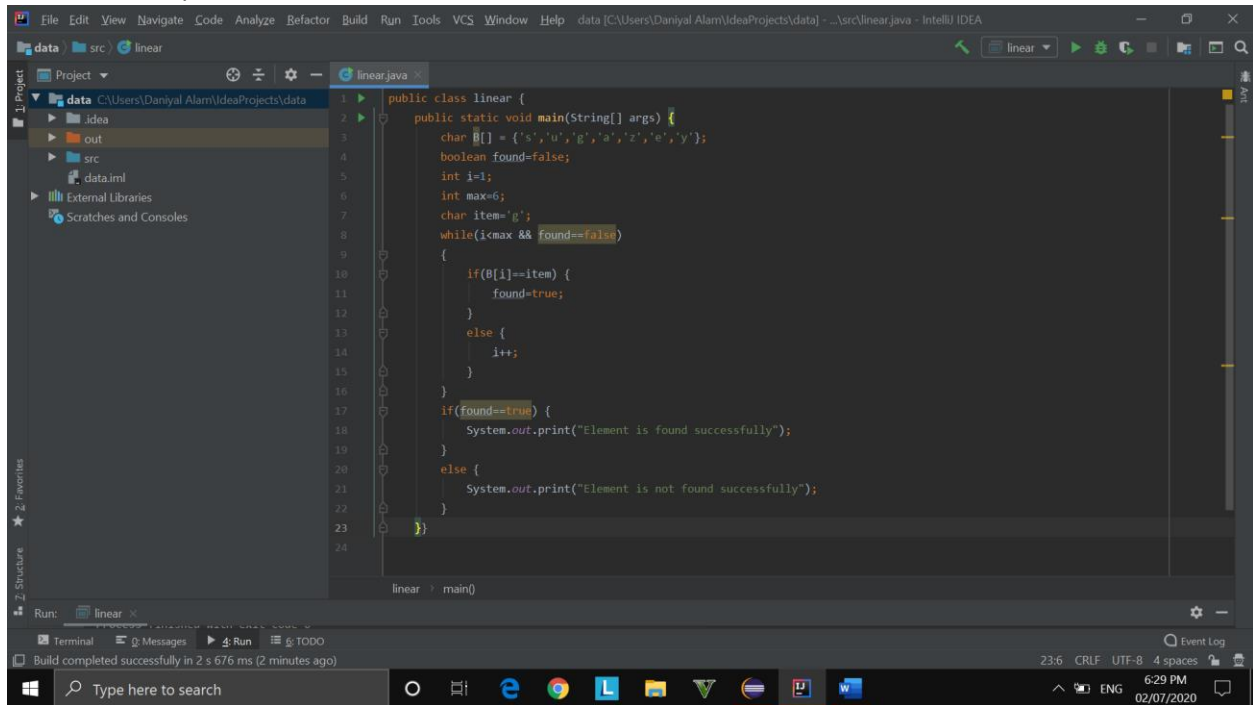


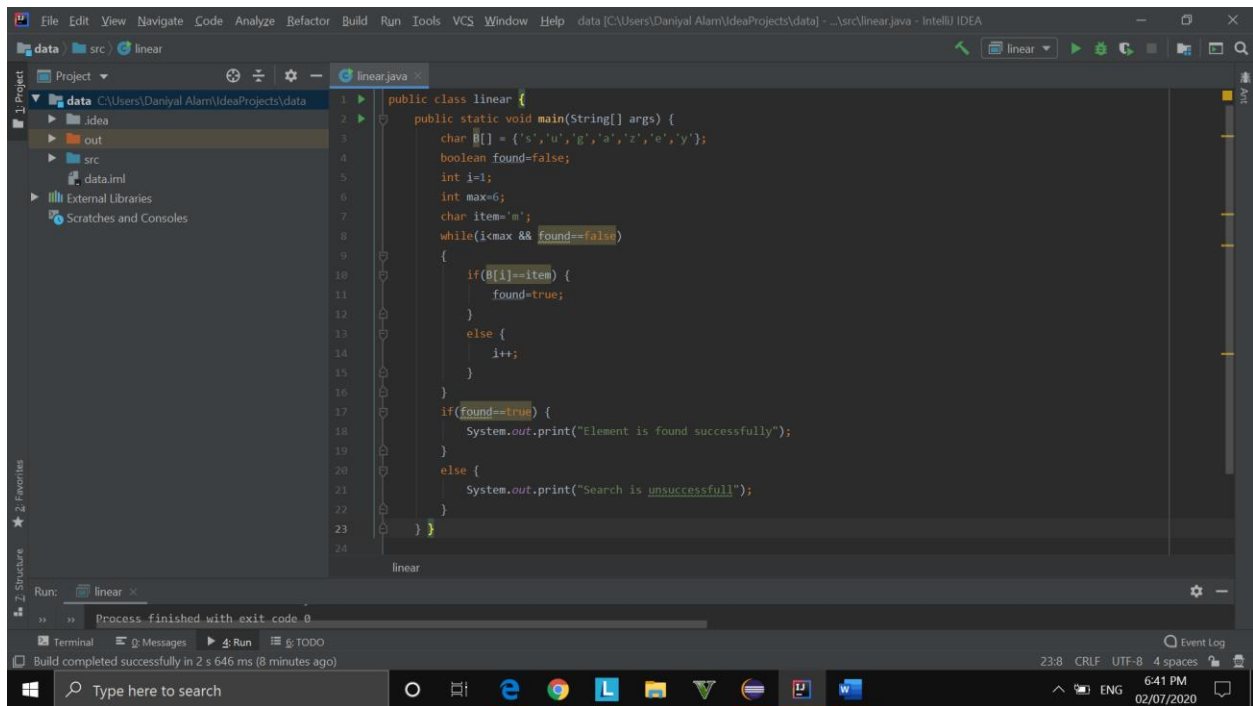
Question no 1 part "a" with code and result.



The screenshot shows an IDE window with a Java file named 'linear.java'. The code defines a class 'linear' with a 'main' method. It initializes a character array 'B' with the characters 's', 'u', 'g', 'a', 'z', 'e', 'y'. A boolean variable 'found' is set to false, and an integer 'i' is set to 1. A 'while' loop runs as long as 'i' is less than or equal to 6 and 'found' is false. Inside the loop, it checks if 'B[i] == item' (where 'item' is 'g'). If true, 'found' is set to true. If false, 'i' is incremented. After the loop, it prints "Element is found successfully" if 'found' is true, and "Element is not found successfully" otherwise. The IDE interface includes a project structure on the left, a terminal at the bottom, and a Windows taskbar at the very bottom.

```
1 public class linear {
2     public static void main(String[] args) {
3         char B[] = {'s','u','g','a','z','e','y'};
4         boolean found=false;
5         int i=1;
6         int max=6;
7         char item='g';
8         while(i<max && found==false)
9         {
10            if(B[i]==item) {
11                found=true;
12            }
13            else {
14                i++;
15            }
16        }
17        if(found==true) {
18            System.out.print("Element is found successfully");
19        }
20        else {
21            System.out.print("Element is not found successfully");
22        }
23    }
24 }
```


Question no 1 part "b" with code and result.



```
1 public class linear {
2     public static void main(String[] args) {
3         char B[] = {'s','u','g','a','z','e','y'};
4         boolean found=false;
5         int i=1;
6         int max=6;
7         char item='m';
8         while(i<max && found==false)
9         {
10            if(B[i]==item) {
11                found=true;
12            }
13            else {
14                i++;
15            }
16        }
17        if(found==true) {
18            System.out.print("Element is found successfully");
19        }
20        else {
21            System.out.print("Search is unsuccessful");
22        }
23    }
24 }
```

Run: linear

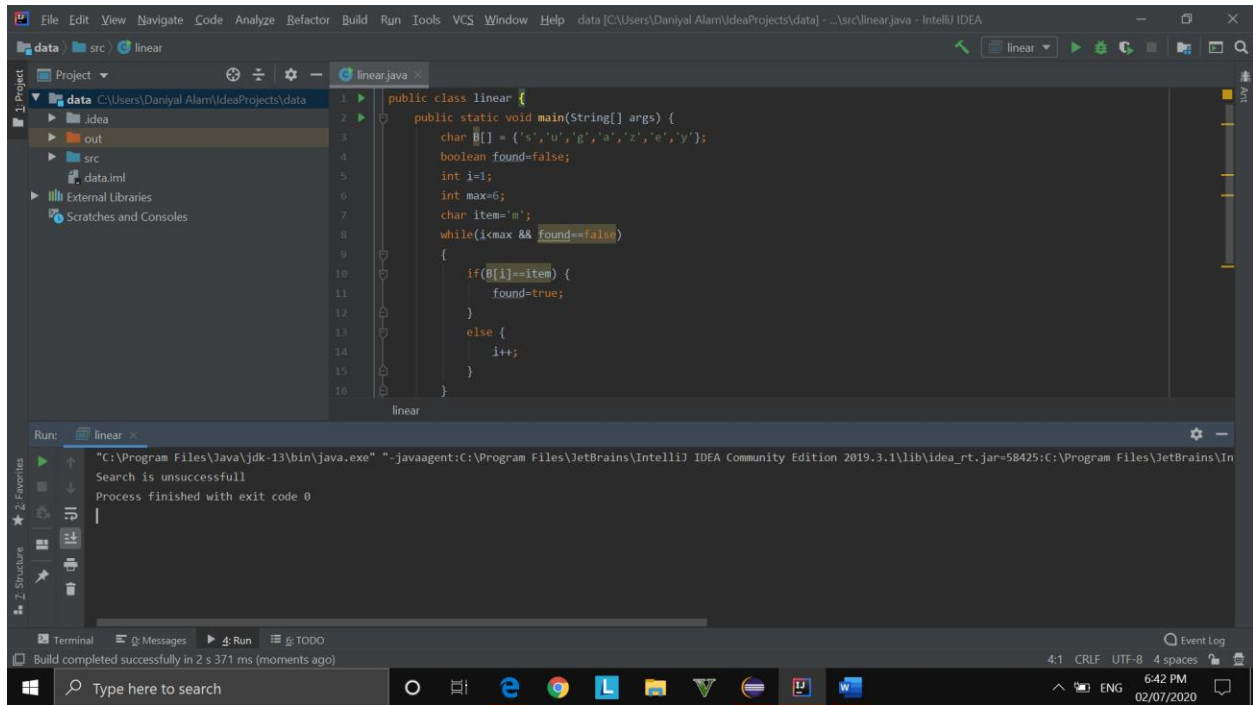
Process finished with exit code 0

Terminal | Messages | Run | TODO

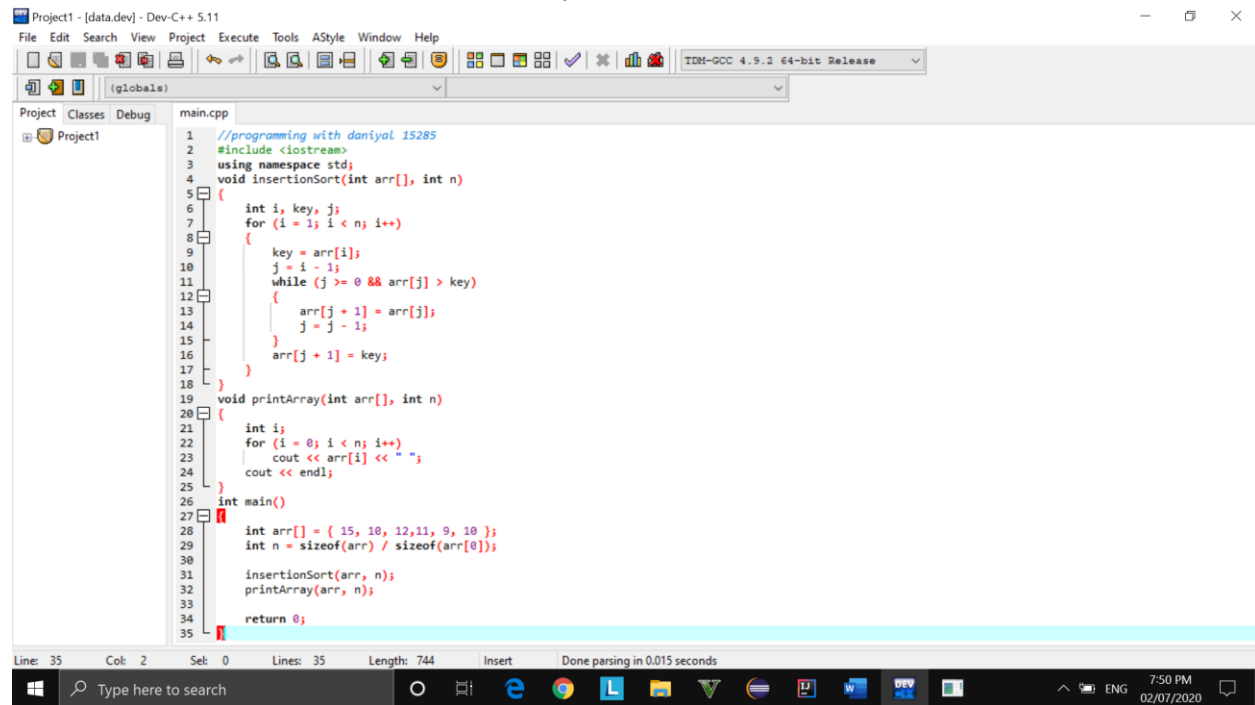
Build completed successfully in 2 s 646 ms (8 minutes ago)

23:8 CRLF UTF-8 4 spaces

6:41 PM 02/07/2020



Question no 2 solved with code and result snapshots.



The image shows a screenshot of the Dev-C++ IDE. The main window displays a C++ program named 'main.cpp' with the following code:

```
1 //programming with daniyal 15285
2 #include <iostream>
3 using namespace std;
4 void insertionSort(int arr[], int n)
5 {
6     int i, key, j;
7     for (i = 1; i < n; i++)
8     {
9         key = arr[i];
10        j = i - 1;
11        while (j >= 0 && arr[j] > key)
12        {
13            arr[j + 1] = arr[j];
14            j = j - 1;
15        }
16        arr[j + 1] = key;
17    }
18 }
19 void printArray(int arr[], int n)
20 {
21     int i;
22     for (i = 0; i < n; i++)
23         cout << arr[i] << " ";
24     cout << endl;
25 }
26 int main()
27 {
28     int arr[] = { 15, 10, 12, 11, 9, 10 };
29     int n = sizeof(arr) / sizeof(arr[0]);
30
31     insertionSort(arr, n);
32     printArray(arr, n);
33
34     return 0;
35 }
```

The IDE interface includes a menu bar (File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, Help), a toolbar, and a status bar at the bottom showing 'Line: 35 Col: 2 Set: 0 Lines: 35 Length: 744 Insert Done parsing in 0.015 seconds'. The Windows taskbar is visible at the very bottom with the search bar and system tray.

