Binary search

```
#include <iostream>
using namespace std;

int binarySearch(int arr[], int low, int high, int key)
{
   if(low <= high)
   {
      int mid = (low + high) / 2;

      if(arr[mid] == key)
         return mid;

      else if(arr[mid] > key)
         return binarySearch(arr, low, mid - 1, key);

      else
         return binarySearch(arr, mid + 1, high, key);
   }
   return -1;
}

int main()
{
   int n, key;

   cout << "Enter number of elements: ";
   cin >> n;

   int arr[n];
```

```
    cout << "Enter sorted elements:\n";
    for(int i = 0; i < n; i++)
        cin >> arr[i];

    cout << "Enter element to search: ";
    cin >> key;

    int result = binarySearch(arr, 0, n - 1, key);

    if(result == -1)
        cout << "Element not found";
    else
        cout << "Element found at position " << result + 1;

    return 0;
}
```

Output :