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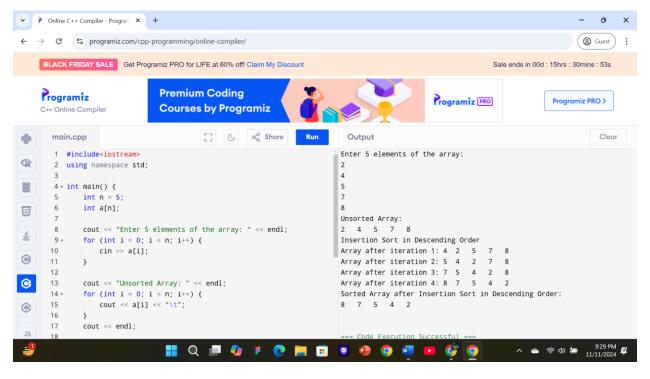
SAP ID :- 53109

Question#1

```
#include<iostream>
using namespace std;
int main() {
  int n = 5;
  int a[n];
  cout << "Enter 5 elements of the array: " << endl;</pre>
  for (int i = 0; i < n; i++) {
    cin >> a[i];
  }
  cout << "Unsorted Array: " << endl;</pre>
  for (int i = 0; i < n; i++) {
    cout << a[i] << "\t";
  }
  cout << endl;
  cout << "Insertion Sort in Descending Order" << endl;</pre>
  for (int i = 1; i < n; i++) {
    int temp = a[i];
    int j = i - 1;
```

```
while (j \ge 0 \&\& a[j] < temp) {
     a[j + 1] = a[j];
    j--;
  }
  a[j + 1] = temp;
  cout << "Array after iteration " << i << ": ";
  for (int k = 0; k < n; k++) {
     cout \ll a[k] \ll "\t";
  }
  cout << endl;
}
cout << "Sorted Array after Insertion Sort in Descending Order: " << endl;</pre>
for (int i = 0; i < n; i++) {
  cout << a[i] << "\t";
}
cout << endl;
return 0;
```

}



Question#2

#include<iostream>

```
using namespace std;

int main() {
    int n = 9;
    int a[n];

    cout << "Enter 9 elements of the array: " << endl;
    for (int i = 0; i < n; i++) {
        cin >> a[i];
    }

    cout << "Unsorted Array:" << endl;
    for (int i = 0; i < n; i++) {
        cout << a[i] << " ";</pre>
```

```
}
cout << endl;
cout << "Bubble Sort" << endl;</pre>
for (int i = 0; i < n - 1; i++) {
  for (int j = 0; j < n - i - 1; j++) {
     if (a[j] > a[j + 1]) {
       int temp = a[j];
       a[j] = a[j + 1];
       a[j + 1] = temp;
     }
  }
  cout << "Array after pass " << i + 1 << ": ";
  for (int k = 0; k < n; k++) {
     cout << a[k] << " ";
  }
  cout << endl;
}
cout << "Sorted Array after Bubble Sort is: " << endl;</pre>
for (int i = 0; i < n; i++) {
  cout << a[i] << " ";
}
```

```
cout << endl;
```

return 0;

}

