Task1:

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

int main() {
  int arr[5];

  // Taking input from the user cout << "Enter 5 integers: "; for (int i = 0; i < 5; i++) {
    cin >> arr[i];
  }

  // Insertion Sort in descending order for (int i = 1; i < 5; i++) {
    int key = arr[i];
    int j = i - 1; while (j >= 0 && arr[j] < key) {
      arr[j + 1] = arr[j];
      j--;
    }
    arr[j + 1] = key;
    // Dry run: Display array after each iteration cout << "Iteration " << i << ": "; for (int k = 0; k < 5; k++)
    {
      cout << arr[k] << " ";
    }
    cout << endl;
  }

  // Display sorted array cout << "Sorted array in descending order: "; for (int i = 0; i < 5; i++) {
    cout << arr[i] << " ";
  }
  cout << endl;

  return 0;
}
```

Task2:

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

int main() {
  int arr[9];

  // Taking input from the user cout << "Enter 9 integers: "; for (int i = 0; i < 9; i++) {
    cin >> arr[i];
  }

  // Bubble Sort in ascending order with early exit bool sorted = false; for (int i = 0; i < 9 - 1 && !sorted;
  i++) {
    sorted = true; // Assume the array is sorted for (int j = 0; j < 9 - i - 1; j++) { if (arr[j] > arr[j + 1]) {
```

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            swap(arr[j], arr[j + 1]); sorted = false; // Found two elements out of order
        }
      }
      // Dry run: Display array after each iteration cout << "Iteration " << i + 1 << ": "; for (int k = 0; k < 9;
      k++) {
        cout << arr[k] << " ";
      }
      cout << endl;
    }

    // Display sorted array cout << "Sorted array in ascending order: "; for (int i = 0; i < 9; i++) {
      cout << arr[i] << " ";
    }
    cout << endl;

    return 0;
}
```