

SET

Code:

```
#include <iostream>

#include <set>

using namespace std;

int main() {

    set<int> mySet;

    int numOfElements;

    cout << "Enter the number of elements to add: ";

    cin >> numOfElements;

    for (int i = 0; i < numOfElements; i++) {

        int element;

        cin >> element;

        mySet.insert(element);

    }

    cout << "Elements in the set: ";

    for (int value : mySet) {

        cout << value << " ";

    }

    cout << endl << "Enter the element to be deleted: ";

    int elementToDelete;

    cin >> elementToDelete;

    mySet.erase(elementToDelete);

    cout << "Set after deletion: ";

    for (int value : mySet) {

        cout << value << " ";

    }

    return 0;
```

Merge, sort

```
#include <iostream>

#include <algorithm>

#include <vector>

using namespace std;

int main() {

    int array1[] = {5, 19, 25, 24, 25};

    int array2[] = {50, 40, 2, 26, 11};

    vector<int> mergedVector(10);

    sort(array1, array1 + 5);

    sort(array2, array2 + 5);

    merge(array1, array1 + 5, array2, array2 + 5, mergedVector.begin());

    cout << "The resulting vector contains:";

    for (vector<int>::iterator it = mergedVector.begin(); it != mergedVector.end(); ++it)

        cout << ' ' << *it;

    cout << "\n";

    return 0;

}
```

```
Vector
#include <iostream>

#include <vector>

using namespace std;

int main() {

    vector<int> numbers;

    int numOfElements;

    cout << "Enter the number of elements: ";

    cin >> numOfElements;

    for (int i = 0; i < numOfElements; i++) {

        int value;

        cin >> value;

        numbers.push_back(value);

    }

    cout << "Elements in the vector: ";

    for (int i = 0; i < numOfElements; i++) {

        cout << numbers[i] << " ";

    }

    cout << endl << "Deleting the last element" << endl;

    numbers.pop_back();

    cout << "Elements in the vector after deletion: ";

    for (int i = 0; i < numbers.size(); i++) {

        cout << numbers[i] << " ";

    }

    return 0;

}
```

```
Stack
#include <iostream>

#include <stack>

using namespace std;

int main() {

    stack<int> myStack;

    myStack.push(34);
    myStack.push(45);
    myStack.push(56);
    myStack.push(22);
    myStack.push(19);

    cout << "Top element: " << myStack.top() << endl;

    myStack.pop();
    myStack.pop();

    cout << "Top element after two pops: " << myStack.top() << endl;

    return 0;

}
```