Standard Template Library STL (C++)

Set

Stack

Map

Queue

Deque

...and more

```
// declaration
vector < data_type > name;
```

```
// declaration
vector < data_type > name;
vector < content > name;
```

```
// declaration
vector < data_type > name;
vector < content > name;
// data type/content/object: int, char, double, string, structure etc.
```

```
// declaration size: 0
vector < int > v;
```

```
// declaration size: 0
vector < int > v;

// operations
```

```
// declaration
vector < int > v;

4 10

// operations index: 0 1

v.push_back(4);
v.push_back(10);
```

```
// declaration
vector < int > v;

4  10 -55

// operations index: 0 1 2

v.push_back(4);
v.push_back(10);
v.push_back(-55);
```

```
// declaration
                           size: 3
vector < int > v;
                             4
                                  10
                                      -55
                    index:
                             0
                                       2
// operations
v.push_back(4);
v.push_back(10);
v.push_back(-55);
v.size(); // returns 3
int x = v[1]; // x = 10
```