STL DS

Best Link🡪 <https://www.tutorialspoint.com/cpp_standard_library/array.htm>

Strarting me jo ye 5 h…iska template defined h like

template<class T,size\_t N>

class array;

size\_t is more or like long unsigned int.

It is used in STL libraried to calculate the sizes of objects.

No need to afraid, it is just another synonym.[ uint ]

**IMPORTANT🡪 see difference between ordered/unordered set/map/list…**

**v.imp.**

1. array<int, 5> ar2 = {1, 2, 3, 4, 5};
2. list <int> gqlist1; [ This is Doubly Linked List]

gqlist1.push\_back(5);

list<int>::iterator it = gqlist1.begin();

gqlist1.insert(it,5);

1. forward\_list<int> flist1 ={1,2,3,4,5};

flist1.assign({1, 2, 3});

for (int&a : flist1)

        cout << a << " ";

for (auto it = f12.begin(); it != f12.end(); ++it)

{

cout<<\*it<<endl;

}

for (auto it = fl2.begin(); it != fl2.end(); ++it)

cout << \*it << endl;

push\_front bihut imp h isme dekh wok is direction me list ko bnda rha h..oppsite h conventional se..ye head ko change krta h..push\_front krne se..

remember this

using namespace std;

int main(void) {

forward\_list<int> fl;

for (int i = 0; i < 5; ++i)

fl.push\_front(i + 1);

cout << "List contains following elements" << endl;

for (auto it = fl.begin(); it != fl.end(); ++it)

cout << \*it << endl;

return 0;

}

Output--::

List contains following elements

5

4

3

2

1

Note-:::

iterator ki jagah ye auto keyword best h..sab jagah use ho jaata h

Methods-

[insert\_after()](https://www.geeksforgeeks.org/forward_list-insert_after-function-in-c-stl/)

Push\_front

Insert method

list<int> l;

for (int i = 0; i < 5; ++i)

l.insert(l.end(), i + 1);

stack<int> st;

st.push(1);

st.pop();

st.top();

st.empty();

VECTOR

vector<int> v;

v.push\_back(1);

v.size();

[Live Demo](http://tpcg.io/KVBIjJ)

#include <iostream>

#include <vector>

using namespace std;

int main(void) {

vector<int> v = {3, 4, 5};

auto it = v.insert(v.begin(), 2);

v.insert(it, 1);

for (auto it = v.begin(); it != v.end(); ++it)

cout << \*it << endl;

return 0;

}

Let us compile and run the above program, this will produce the following result −

1

2

3

4

5