

## STL List Sequential Container

- A `std::list` has constant time insertion & deletion at *any* point in the sequence (not just at beginning & end)
  - performance trade-off: it does not offer a *random-access* iterator
- Implemented as doubly-linked list
  - `forward_list` is a more restrictive optimization

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

int main() {
    list<char> l;
    for(int i = 0; i < 10; i++)
        l.push_back('A' + i);
    cout << "Size = " << l.size() << endl;
    cout << "Contents: ";
    while (!l.empty ()) {
        auto p = l.begin();
        cout << *p;
        l.pop_front();
    }
    return 0;
}
```