STL[1]: map and set

@asmn

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Set

WHY Set?

S={1,2,5,8} W={3,5,8}

3 in S? 5 in W?

...other set operation

Set

Initialization:

set<type> S;

insert:

S.insert(123);

delete:

S.erase(123) or S.erase(it)

map

WHY map?

Limit of Array:

A[0]=2, A[-1]=?, A[“abc”]=?,A[vector<int>]=?

map

Initialization:

map<type1,type2> M;

Initialization:

M[“abc”]=2;

Deletion:

M.erase(“abc”) or M.erase(it)

HW5-1

Iterator

```
map<type1, type2> ::iterator it;
set<type>::reverse_iterator rit;
for(it=M.begin(); it != M.end(); ++it){
        cout << it->first << " " << it->second << endl;
}
for(it=S.rbegin(); it != M.rend(); ++it){
        cout << *it << endl;
}
M.erase(it);
S.ease(it);
```

Multiset\Multimap

```
multiset<int> S;
S.insert(1);
S.insert(1);
S.count(1);//output 2
S.erase(1);//output 0
```

inside map and set

red black tree

Don’t mind these detail