Algorithms

accumulate

- accumulate(start, end, initial value)
  - call + operator for each element
  - ex

    sum = accumulate(n.begin(), n.end(), 0)
    sent = accumulate(str.begin(), str.end(), string(“”))

accumulate with custom function

- accumulate(start, end, init, myfunc);
- 은 다음과 같다

```
s = init;
for( p: v )
 s = myfunc( s, *p );
return s;
```

- Default myfunc: s = s + *p;
- EX: print vector<int> v
  - accumulate(v.begin(), v.end(), string(“”), mf)
  - string mf(string a, int b)
    - return a + “, “ + to_string(b);

replace

- replace(start, end, old value, new value)
- EX
  - replace(n.begin(), n.end(), 10, 100)
  - replace(w.begin(), w.end(), string(“one”), string(“two”))

fill

- fill(numbers.begin(), numbers.begin()+3, 0);

sort

- sort(words.begin(), words.end());

copy

- copy(src's start, src's end, dest's start);

- EX
- copy(s.begin(), s.begin()+10, d.begin());

- NOTE:
  - All range is [start, end)
  - including start, excluding end

generate

- generate(start, end, genfunc)
- Call genfunc to fill the container with data