

Function Templates

```
template <typename T> // square number
T sq(T x){
    return x*x;
}

template <typename Container, typename F>
void apply(Container& c, F f){ // x <- f(x) forall x in c
    for(auto& x: c)
        x = f(x);
}

int main(){
    std::vector<int> v={1,2,3};
    apply(v,sq<int>);
    output(v); // 1 4 9
}
```