

## Question

Write a function maximum that computes the largest element in a list<int>.

## Solution

We initialize local variable **max** with the last element in our list and we remove it from the local copy of the list. While our list is not empty we compare **max** and last element of the list. A bigger value we assign to a variable **max**. If the list is empty we return **max**.

## Answer

```
int maximum(list<int> L)
{
    if (!L.size())
        return 0; // we check, if our list is empty, in order to avoid exception
    int max = L.back(); // we start searching maximum in our list from the back side
    L.pop_back(); // we delete last element
    while(L.size()) // this will stop, when the list is empty
    {
        if(L.back() > max) // we check next element in our list
            max = L.back();
        L.pop_back(); // we delete checked element
    }
    return max;
}
```