```cpp
//
//  main.cpp
//  AbolosteCpp_ch16_4
//

#include <iostream>
using std::cout;
using std::endl;

//Class for a pair of values of type T:
template<class T>
class Pair {
public:
    Pair();
    Pair(T firstValue, T secondValue);
    void setFirst(T newValue);
    void setSecond(T newValue);
    T getFirst() const;
    T getSecond() const;
    Pair<T> update(T a, T b);
    T addUp(const Pair<T>& thePair);
private:
    T first;
    T second;
};

template<class T>
Pair<T>::Pair(T firstValue, T secondValue) {
    first = firstValue;
    second = secondValue;
}

template<class T>
void Pair<T>::setFirst(T newValue) {
    first = newValue;
}

template<class T>
T Pair<T>::getFirst() const {
    return first;
}

template<class T>
Pair<T> Pair<T>::update(T a, T b) {
    return Pair<T>(first + a, second + b);
}

template<class T>
Pair<T>::Pair() {
}

template<class T>
T addUp(const Pair<T>& thePair){
    return thePair.first + thePair.second;
}
```

```
int main() {
    Pair<char> p('A', 'B');
    cout << "First is " << p.getFirst() << endl;
    p.setFirst('Z');
    cout << "First changed to " << p.getFirst() << endl;
    p = p.update(1, -1);
    cout << "First changed again to " << p.getFirst() << endl;
    return 0;
}
```