Template classes

```
template<class T>
class Arithmetic {
 private:
   T a;
   T b;
 public:
   Arithmetic(T a, T b);
   T add();
   T sub();
 };
template<class T>
Arithmetic<T>:: Arithmetic(T a, T b){
     this->a =a;
        this->b =b;
template <class T>
T Arithmetic :: add(){
   T c;
   c = a+b;
   return c;
}
```

→ not always use T, use when needed

```
template <class T>
int arithmetic<T> :: sub() {
    T c;
    c = a - b;
    return c;
}

int main() {
  Arithmetic<int> ar(10, 5);   → everything will be int
  cout << ar.add();
  Arithmetic <float> ar1(1.5, 1.2);   → everything will be float
  cout << ar1.add ();
}
```