STL (Member) Function Adapters

- Member function & pointer-to-function adapters can be used to allow C++ class member functions or C-style functions as arguments to STL algorithms
  - **Mem_fun(PtrToMember mf)** converts a pointer to member to a functor whose first arg is a pointer to the object
  - **mem_fn()** converts a pointer to member to a functor whose first arg is a pointer to the object
  - **ptr_fun()** converts a pointer to a function & turns it into a functor

```
template<typename _Arg1,
         typename _Arg2,
         typename _Result>
pointer_to_binary_function
  <_Arg1, _Arg2, _Result>
ptr_fun(_Result (*__x)(_Arg1,
                       _Arg2)){
  return pointer_to_binary_function
    <_Arg1, _Arg2, _Result>(__x);
}
```

STL Pointer-to-Member Function Adapter Examples

```cpp
int main() {
  vector<WrapInt> aVect(10);

  WrapInt wi (10);

  for (int i = 0; i < 10; i++)
    aVect[i] = WrapInt(i + 1);

  cout << "Sequence contains: ";
  for_each(aVect.begin(), aVect.end(),
           mem_fun_ref(&WrapInt::showval));

  cout << endl;
  ...
```

See github.com/douglascraigschmidt/CPlusPlus/tree/master/STL/S-09/9.4