

C++ Homework 05-1

1. The use of the function pointer. Please make sure you understand the algorithm you used below.
 - a. Write a template function that can do **bubble sort** with all values of any type stored in a vector
 - b. Write a template function that can do **insertion sort** with all values of any type stored in a vector
 - c. Write a function sort to sort a vector, and allow the use of function pointer to select between **bubble sort** and **insertion sort** you designed in a and b, and call the sort function with two function pointer in main function.
2. Write a class name Engine
 - a. with three private member variables: CC, type, weight
 - b. Write a default and non default constructor
 - c. Write all five special member functions , and invoke each special member function with the messages to confirm ◦
 - i. for example: in move constructor: `cout<< "invoking move constructor!"<<std::endl;`