

CENG 112 – DATA STRUCTURES

Homework 4

April 26, 2017

Due Date: May 10, 2017

Assignment 1 Sorting Contact Items

Modify the insertion sort (version 2) in `sort_insertion.cc` to sort items of a template type `T`. It should still take a comparison function as a parameter, but this function should also be a template function. Write a program to read an array of `ContactItem`'s and sort them using the modified insertion sort that you have written.

Hint: Use the code in `sort_selection_struct.cc` as a guideline.

Assignment 2 Quicksorting Contact Items

Do the same exercise using quicksort (version 2) in `quicksort.cc`

NOTE: This is a single part homework, there will be no late submission deadline. Check your programs with `valgrind` to ensure that they do not have memory leaks.