

Program 3(a) The Very Simple Dictionary exercise

Due: Tuesday, October 14, 10:00 p.m.

Please do Exercise 5.17, page 206, from Weiss.

That is, implement a Dictionary class, which is just like a Hash Table except that it has both keys and values (or, as Weiss calls them, key and “definition,” since in the literal case of a natural language dictionary, the value would be the definition of the word.

You will be using this class later on, to do something interesting.

You must turn in your finished class files, the versions of the Hash Table files that you use, and the main routine that you used to test it. In class on Wednesday, we will expect hard copy of the those three routines and your output.

You should plan on using one of Weiss’s two hash table implementations. You can tweak them if you like, or use them as written. Either the bucket/chaining or the quadratic probing is fine. There will be no deletions.

Your constructor should definitely take a size argument, which may be defaulted.

You must write a template class, but you can test on the assumption that the keys will always be of type string.

Note: You may as well use the STL pair struct that you get with `#include<utility>` and not the pair that Weiss suggests. It gives you the function `make_pair`, and field names `first` and `second` so you can type, for example,

```
pair<string,int>p;  
p=make_pair("cat",17);  
stringiWillHoldCat=p.first;  
intiWillBe17=p.second;
```