

Computer Science 111 Dictionary Lab

Spring 2014

This lab lets you practice using **dictionaries** and **lists** as well as strings and tuples.

Point your browser to the course website and get a copy of **friends.py**. Fire up Idle and open **friends.py** I have started a program to keep track of my friends and their birthdays, but I didn't get very far. Your job is to finish the program.

- Open the program in IDLE, find **main** and take a look at what it does.
- Go through the tasks and replace each of the **Not implemented** print statements with the missing function bodies. Fix them one at a time and check your work after each one.
- Each function must prompt the user for whatever information it needs, perform the operation on the dictionary, print the result. If the friend list is updated, the function returns it to the calling function.
- You just need to complete **three** of the functions to get credit for this lab. Below is a list of additional features you can add to this code.

Try adding these functions to your code.

- Re-write the `printFriends` and `printCloseFriends` functions so they work recursively instead of with loops.
- `UpdateFriend`: Look up a friend by name. Then go through the keys associated with that friend and invite the user to update all of the values associated with that friend. And add new key / value pairs.
- `Delete a friend`. Look up a friend by name and remove that friend from the list. (Use the **del** keyword or the `pop` method.)
- `Remove all friends that have a friendship scores less than some value provided by the user`.
- `Change the list of friends to a dictionary of friends`, where the keyvalues are (unique) nicknames. Write new versions of your favorite functions from this program.