22C:16 Quiz 9
Date: Apr 10th, 2012

1. [**5 points**] Suppose that D is the dictionary {"what":"doing", "are":"what", "you":"next", "doing":"are", "next":"you", "Saturday?":"Saturday?"}. Write down what the value of D is after each of the following Python statements. Evaluate each statement starting with the same value of the dictionary D, mentioned above.

   (a) `D["what"] = D["are"]`

   (b) `D.update({"Sunday":"Saturday?", "what":"what"})`

   (c) `del D["you"]`

   (d) `D["which"] = D[D["you"]]`

   (e) `D.clear()`

   Turn over for Problem 2.

2. [**5 points**] Suppose that D is the dictionary of 5-letter words and their "neighbors" constructed in the playGame program that we wrote in class last week. Suppose that we want to write a function called secondNeighbors that takes a word w that appears as a key in D and returns the list of all words that can be obtained by replacing either one or two letters in w. Code for this function is provide below with some parts missing. Your task is to complete this function.

```
def secondNeighbors(w, D):
    neighborsList = D[w]
    secondNeighborsList = neighborsList
    for neighbor in neighborsList:
        # Find the list of neighbors of the word neighbor

        L = _____

        # For each word in list L, append it to secondNeighborsList,
        # if it is not already in it. Can be done in 3 lines of code.


        _____

        _____

        _____

    return secondNeighborsList
```