

22C:16 Quiz 10
Date: Apr 17th, 2012

1. [5 points] You are required to write a function called `sumFrequencies` that takes as parameter a dictionary of word frequencies and returns a dictionary that tells us the how many words there are that start with each letter “a” through “z”. For example, the given dictionary might be `{"hello": 11, "ask": 19, "animal": 2, "hi": 6, "build": 4, "able": 3}`. The function should then return `{"h": 17, "a": 24, "b": 4}`. You should assume that all the words in the given dictionary are made up entirely of lower case letters.

Turn over for Problem 2.

2. [5 points] Write down the output produced when the following function is called as `fibonacci(7)`.

```
def fibonacci(n):
    print n
    if n == 1:
        return 1
    if n == 2:
        return 1
    if n == 3:
        return 2

    return 2 * fibonacci(n-2) + fibonacci(n-3)

# Main program
x = fibonacci(7)
print "The 7th Fibonacci number is: ", x
```