

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 program is executed.

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

    if n % 2 == 0:
        return fibo(n-2) + fibo(n-1)
    else:
        return fibo(n-1) + fibo(n-2)

# Main program
x = fibo(5)
print "The 5th Fibonacci number is:", x
```