1. Since hashFunction1 adds together the values of each letter in the key the keys “tea” and “ate” would have the same result. However, with hashFunction2 multiplying the letter’s value by its location in the key “tea” and “ate” would not have the same result.

2. hashFunction2 is preferable over hashFunction1 because it will result in less collisions. Less collisions means a more evenly distributed hash map which will have better performance.

3.

4.

5.

6.