# CS62: Spring 2025 | Lecture #20 (Hashtables Pt 1) worksheet | Jingyi Li

1. Convert the word "bee" into a number by using our "powers of 27" strategy. That is, *hash* "bee".
   Reminder: $cat_{27} = (3 \times 27^2) + (1 \times 27^1) + (20 \times 27^0) = 2234_{10}$

2. Insert the key-value pairs (47, 0), (3, 1), (28, 2), (14, 3), (9,4), (47,5) into a separate chaining hash table of size m = 7.
   Assume the hash function is calculated as key % m.

3. Place the existing elements (you can practice drawing ☺) on the new hashtable that has been doubled in size. Assume we are placing items at the end, instead of beginning, of the list. (Hint: how do we reduce hashes to bucket indices? How does that change with resize?)



N = 6     M = 4     N / M = 1.5