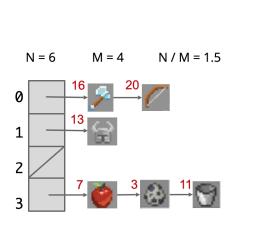
CS62: Fall 2025 | Lecture #18 (Hashtables Pt 1) worksheet | Prof. Li

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?)



0 ? 1 ? 2 ? 3 ? 4 ? 5 ? 6 ? 7 ?	iat oriaris	
2 ? 3 ? 4 ? 5 ? 6 ?	0	?
3 ? 4 ? 5 ? 6 ?	1	?
4 ? 5 ? 6 ?	2	?
5 ? 6 ?	3	?
6 ?	4	?
	5	?
7 ?	6	?
	7	?