

# Questions



Why can't we just use an array?

What is a hash function? How does it differ from the `hash_code` method in Java?

What are the two ways we deal with collisions?

Why is it important that the probe sequence visits every spot in the hashtable?

# Questions

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What are three potential probing mechanisms?

If we insert random data into a hashtable, what is the worst case running time for searching for an item?

If an open-addressed hashtable is half full, on average, how many entries would we expect to search before finding an open one? 75% full?

If we plan to do a lot of deleting, what type of hashtable should we use?

# Questions



What is the largest  $\alpha$  can be for a hashtable with chaining? Open-addressed?

## Fill in the table for division method

$$h(k) = k \bmod m$$

m	k	h(k)
11	25	
11	1	
11	17	
13	133	
13	7	
13	25	

Fill in the table for multiplication method

m	k	A	kA	h(k)
8	15	0.618		
8	23	0.618		
8	100	0.618		

$$h(k) = \lfloor m(kA - \lfloor kA \rfloor) \rfloor$$