## **Running Times**

What are the running times for:

insert

Best:
Worst:
find
Best:
Worst:
delete

Best: Worst:

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## **Average Case**

What about on average? Let's assume that the keys are randomly distributed

What is the average running time if the size of the table TableSize and we've inserted n keys?

insert
find
delete

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## Some Possible Hash Functions

For each of these hash functions, think about

- -what Strings will cause collisions
- -how long it will take to evaluate

Keys: strings of form  $s_0 s_1 \dots s_{k-1}$  ( $s_i$  are chars in range [0,256])

$$h(K) = s_0$$

$$h(K) = \sum_{i=0}^{k-1} s_i$$

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## Other Classes

Should we use that same hash function if the strings are all URLs?