

Open Hashing Practice Sheet

This worksheet will not be collected and is for your own practice/reference.

Linear Probing: $\text{hash}(\text{key}) \{ \text{return } (\text{key}[0] - \text{a} + 1) \% 5 \}$

Insert("cow", "moo") => hash() returns __ => Probe __ times

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Insert("dog", "woof") => hash() returns __ => Probe __ times

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Insert("chicken", "bawk") => hash() returns __ => Probe __ times

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Quadratic Probing: $\text{hash}(\text{key}) \{ \text{return } \text{key} \% 6 \}$ (Probe: $\text{hash}() + i^2$)

Insert(1, 0.2) => hash() returns __ => Probe __ times

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Insert(7, 0.01) => hash() returns __ => Probe __ times

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Insert(3, 0.95) => hash() returns __ => Probe __ times

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Insert(13, 0.5) => hash() returns __ => Probe __ times

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Continued On Back...

Double Hashing : (Probe: $\text{hash}() + i * \text{hash_step}()$)

$\text{hash}(\text{key}) \{ \text{return key \% 6} \}$ $\text{hash_step}() \{ \text{return key \% 4} + 1 \}$

Insert(1, 0.2) => hash() returns __ => Probe __ times

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Insert(7, 0.01) => hash() returns __ => Probe __ times

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Insert(3, 0.9) => hash() returns __ => Probe __ times

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Insert(13, 0.5) => hash() returns __ => Probe __ times

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