

# Tabulation Hashing Performance Benchmark

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May 2012

## 1 Introduction

-everything uses hashing

- list languages taht uses hashings for stuff and find other real world uses  
does databasee or something use hashing?

-map reduce o.O?

-big o is important but real performance is also important

- while multiplicative hashing might be one of the simpliest hash functions  
but tabulation hashing might be even better and have better performance as  
demonstrated by the paper and stuff

- we wahted to see how the other collisions resolution compare and and the  
pros and cons of each

## 2 Tabulation Hashing

overall idea of tabulation hashing

make table

look stuff up etc

- 3 independence

-4 independence

- 5 independence

### 3 Implementation

overall view

- about each function and mention the difference between them

- talk about table sizes and how much space they take

- problems we ran into

- counting collisions instead of absolute time ( or maybe we can do both)

### 4 Benchmark Results

Compare pure hashing vs tabulation hashing

- compare linear probing

- compare quadratic probing

- compare chaining

- compare between the three

- some analysis on memory access and mention pros ad cons of each

### 5 Conclusion

summryze what we wanted to find out

- what we did

- and the results we found