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CSE 331  
Project 4 – Hashes

### 1) **Unique Words**

alphabet.txt = 26  
lines.txt = 2268  
midsummer.txt = 3015  
plurals.txt = 4537  
scene1.txt = 714

2) For midsummer's night, my first hash function is (probably) the best. At load factor 5, it had percent empty of 2.03%, vs 5.46% and 4.71%. At load factor 10, HashB is out of the running, and HashC is only a half percent less empty than HashA.

3) For lines.txt, Hash A is easily the best. Beating out the other two functions by ~10% on Percent Empty for load factor of 10

4) For plurals.txt, with load factor 10, HashA is again the best.  
Percent Empty A = 15.3%, B = 26.1%, C = 24.2%