Data Structures & Algorithms Sessional II

Course: CSE 208
Offline 7: Hash Table

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Hash Table Size	Collision Resolution Method	Hash1		Hash2	
		# Of Collisions	Average Probes	# Of Collisions	Average Probes
5000	Chaining	2573	2.092	2541	2.126
	Double Hashing	2854	1.121	2799	1.148
	Custom Probing	2852	1.114	2774	1.163

Hash Table Size	Collision Resolution Method	Hash1		Hash2	
		# Of Collisions	Average Probes	# Of Collisions	Average Probes
10000	Chaining	2831	2.107	2715	2.128
	Double Hashing	3158	1.14	3040	1.149
	Custom Probing	3141	1.122	3079	1.145

Hash Table Size	Collision Resolution Method	Hash1		Hash2	
		# Of Collisions	Average Probes	# Of Collisions	Average Probes
20000	Chaining	2145	2.227	2164	2.255
	Double Hashing	2518	1.357	2527	1.362
	Custom Probing	2541	1.308	2528	1.365

```
int Hash1(string key)
{
   int hash = 0;
   for (char c : key)
      hash = ((hash + c - 'a') * hbase) % hashes.size();
   return hash;
}

int Hash2(string key)
{
   int hash = 0;
   for (char c : key)
      hash = (hash * hbase ^ (c - 'a')) % hashes.size();
   return hash;
}

int aux_Hash(string key)
{
   int ahash = 0;
   for (char c : key)
      ahash = ((ahash + c - 'a') * ahbase) % hashes.size();
   return ahash;
}
```