Total number of words – 8000

Table size > 20, 000

So, the load factor is 20, 000 / 8, 000 = 0.4

Possible total ascii values sum we can get from min 3 characters to max 8 characters is 96 to 976

96 – least possible word is “ ”

976 – max sum possible word is “zzzzzzzz”

Total possible distinct sum values from words are – 976 – 96 + 1 = 881 distinct values

So, 8000 words will not have different ascii sum value.

Number of words that will have same ascii sum values are – 8, 000 / 881= 9.08

That means there will be a at least 9 collisions for each ascii value.

So, the above hashing algorithm is not adequate to use for 8000 words.