Inserting into Counting Bloom filter:

a) Initial state:

m bit array (m =16)

|  |  |  |  |
| --- | --- | --- | --- |
| 0000 | 0000 | … … | 0000 |

4 – bit counter associated with each bit of the bit array.

b) Inserting ‘x’: Calculate SHA1(x) and slice it into 8 parts (k = 8) and set corresponding bits in the bit array, if not already set and increment 4 – bit counters.

|  |  |  |  |
| --- | --- | --- | --- |
| 0001 | 0001 | … … | 0000 |