COSC 520 Assignment 1

Question1: the time and space computational complexity

- n is the number of elements/logins.
- e is the number of entries.
- k is the number of hash functions.
- m is the number of bits in the bit array.
- b is the number of buckets/indexes.

	Lookup time complexity	Space(auxiliary) complexity	references
Linear search	O(n)	O(1)	
Binary search	O(logn)	O(1)	
Hashing	O(e)	O(1)	
Bloom filter	O(k)	O(m+k)	Bloom Filters - Introduction and Implementation - GeeksforGeeks
Cuckoo filter	O(1)	O(b)	1.Cuckoo filter - Wikipedia 2.CUCKOO vs BLOOM filter. In this article, I am trying to... | by Farhan Ali Khan | techlog | Medium