Conceptual Questions.

Abstract Data type (ADT) is a type (or class) for objects whose behavior is defined by a set of values and a set of operations.

A stack is a linear data structure in which elements can be inserted and deleted only from one side of the list, called the top while a queue is a linear data structure in which elements can be inserted only from one side of the list called rear, and the elements can be deleted only from the other side called the front.

Heap - A heap is a tree-based structure in which each parent node's associated key value is greater than or equal to the key values of any of its children's key values.

Trie - A trie, also known as a keyword tree, is a data structure that stores strings as data items that can be organized in a visual graph.

Linked list - A linked list stores a collection of items in a linear order. Each element, or node, in a linked list contains a data item, as well as a reference, or link, to the next item in the list.

A binary tree is a tree data structure comprising of nodes with at most two children i.e. a right and left child. The node at the top is referred to as the root. A node without children is known as a leaf node. Some common operations that can be conducted on binary trees include insertion, deletion, and traversal.

Hash table - A hash table -- also known as a hash map -- stores a collection of items in an associative array that plots keys to values. A hash table uses a hash function to convert an index into an array of buckets that contain the desired data item. Hash tables are used to quickly store and retrieve data (or records).