

Tutorial 8 Conceptual Questions:

- 1) ADT is a data types that includes a set of defined operation and variables. It separates the specification and implementation. It is defined by its behavior from the point of view of a user of the data.
- 2) A queue operates as First In First Out while A stacks operates as Last In First Out. A queue will insert the new value into head and remove the value from the head. A stack will insert the new value from the tail and remove the value from the head.
- 3) Primitive: The most basic types. For example, int, char, bool.
Composite: A data type defined by programmer which can construct in a program using the primitive data type. For example, typedef struct in C.
Abstract data: A data type includes a set of defined operation and variables.
- 4) Binary tree stored data with a parent node and at most two child nodes. Common operations are insert, maxDepth, minValue, print.
- 5) Hash table is a data structure that can map a keys to values. Common operations are get, put, contains.