# Data Structures – Assessment Bank

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\*\*Instructions:\*\* Choose the best answer for each multiple-choice question.  
  
1. Which of the following is NOT a fundamental data structure?  
 a) Array b) Stack c) Queue d) Algorithm  
  
  
2. A linear data structure where elements are added and removed from the same end is called a:  
 a) Queue b) Stack c) Tree d) Graph  
  
  
3. What is the primary characteristic of a linked list?  
 a) Elements are stored contiguously in memory.  
 b) Elements are stored non-contiguously and linked via pointers.  
 c) Elements are organized hierarchically.  
 d) Elements are stored in a key-value pair format.  
  
  
4. Which data structure uses LIFO (Last-In, First-Out) principle?  
 a) Queue b) Deque c) Stack d) Priority Queue  
  
  
5. In a binary tree, a node can have at most how many children?  
 a) 0 b) 1 c) 2 d) 3  
  
  
6. What does FIFO stand for in the context of data structures?  
 a) First In, First Out b) First In, Last Out c) Last In, First Out d) Last In, Last Out  
  
  
7. An array is a:  
 a) Non-linear data structure b) Dynamic data structure c) Linear data structure d) Hierarchical data structure  
  
  
8. Which data structure is best suited for implementing a Breadth-First Search (BFS) algorithm?  
 a) Stack b) Queue c) Linked List d) Tree  
  
  
9. A data structure that allows efficient insertion and deletion at both ends is a:  
 a) Stack b) Queue c) Deque d) Priority Queue  
  
  
10. Which of the following is a type of tree data structure?  
 a) Array b) Linked List c) Binary Search Tree d) Stack

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