

50+ Dynamic Array MCQs with FREE PDF

1. *In which of the following cases dynamic arrays are not preferred?*

- a) If the size of the array is unknown
- b) If the size of the array changes after few iterations
- c) If the memory reallocation takes more time i.e. expensive
- d) If the array holds less number of elements

Answer: If the array holds less number of elements

2. *In special case, the time complexity of inserting/deleting elements at the end of dynamic array is*

- a) $O(n)$
- b) $O(n^{1/2})$
- c) $O(\log n)$
- d) $O(1)$

Answer: $O(n)$

3. *What is a dynamic array?*

- a) A variable size data structure
- b) An array which is created at runtime
- c) The memory to the array is allocated at runtime
- d) An array which is reallocated everytime whenever new elements have to be added

Answer: A variable size data structure

4. *What is meant by physical size in a dynamic array?*

- a) The size allocated to elements
- b) The size extended to add new elements
- c) The size of the underlying array at the back-end
- d) The size visible to users

Answer: The size of the underlying array at the back-end

5. *The number of items used by the dynamic array contents is its _____*

- a) Physical size
- b) Capacity
- c) Logical size
- d) Random size

Answer: Logical size

6. How will you implement dynamic arrays in Java?

- a) Set
- b) Map
- c) HashMap
- d) List

Answer: List

7. Which of the following is the correct syntax to declare an ArrayList in Java?

- a) ArrayList al = new ArrayList();
- b) ArrayList al = new ArrayList[];
- c) ArrayList al() = new ArrayList();
- d) ArrayList al[] = new ArrayList[];

Answer: ArrayList al = new ArrayList();

8. Array is divided into two parts in _____

- a) Hashed Array Tree
- b) Geometric Array
- c) Bounded-size dynamic array
- d) Sparse Array

Answer: Bounded-size dynamic array

9. Which of the following is a disadvantage of dynamic arrays?

- a) Locality of reference
- b) Data cache utilization
- c) Random access
- d) Memory leak

Answer: Memory leak

10. What is the time complexity for inserting/deleting at the beginning of the array?

- a) O(1)
- b) O(n)
- c) O(logn)
- d) O(nlogn)

Answer: O(n)