

Arrays

1. When should an array data structure be used?

- a. Array data structure should be used when numerous data of the same type has to be stored.

2. What is an advantage of an array data structure?

Creation of an array is simple.

Inserting data into an array by making use of loops is simple. Also,

Extracting data from the array is simple by making use of loops.

3. What is the disadvantage of an array data structure?

- i) Arrays can store only homogeneous data. Heterogeneous data cannot be stored
- ii) The size of an array is fixed throughout the program execution. Size of an array
 - b. is neither increased nor decreased during program execution.
- c. iii) Arrays demand contiguous memory locations on the RAM. Arrays cannot utilize
- d. dispersed vacant memory locations.

4. Who creates arrays in Java and where?

- a. JVM creates array on the heap segment.

5. What is the advantage of jagged array data structure?

- a. In real life, the data is not regular. Rather in most of the time, data is irregular or jagged. Hence, to provide a solution for the jagged data, java supports jagged array data structure.

6. Can array be used without initialization?

- a. Yes.

7. Are arrays objects in Java?

- a. Yes.

8. What are the default values associated with an array?

- a. The default value of an array depends upon the data type of an array.
Eg: int-0, float-0.0, char-blank character, boolean -false, String-null.

9. Who de-allocates memory of an array?

- a. A thread called as Garbage collector thread would de-allocate memory of an array.

10. When `ArrayIndexOutOfBoundsException` occurs?

It is a run time exception. It will occur when the program tries to access invalid index of an array. Index higher than the size of the array or negative index.