**SRM INSTITUTE OF SCIENCE AND TECHNOLOGY, Kattankulathur**





**School of Computing**

**21CSC201J – Data Structures and Algorithms**

**Topic: Fundamentals of Arrays and their Operations**

**Activity: Fill in the Blanks**

1. An array is a collection of elements stored in \_\_ **contiguous** \_\_ memory locations.
2. The index of the first element in an array is usually \_\_**0**\_\_.
3. To access the 5th element in an array named arr, we use \_ **arr**[**4**]\_\_\_.
4. The operation to add an element at the end of an array (in dynamic arrays) is called \_ **append**\_\_\_.
5. The process of finding the position of an element in an array is known as \_ **searching**\_\_\_.
6. Inserting an element in the middle of an array requires \_ **shifting** \_\_\_ the elements.
7. Arrays in C are declared using the \_ **data** **type**\_\_\_ operator followed by the size in square brackets.
8. A \_\_ **two-dimensional**\_\_ array has two dimensions and is often used to represent matrices.
9. Arrays store elements of the \_\_ **same** \_\_ data type.
10. The number of elements an array can hold is known as its \_ **size** \_\_\_.
11. Arrays can be \_\_ **single-dimensional**\_\_ or multi-dimensional.
12. The operation to remove an element from a specific position in an array is called \_ **deletion**\_\_\_.
13. In C, the array index must always be a(n) \_\_ **integer** \_\_ value.
14. Arrays are \_\_ **fixed** \_\_ in size once declared in static programming languages like C.
15. A loop commonly used to traverse an array is the \_\_ **for** \_\_ loop.