Arrays in C

10.Explain the concept of arrays in C. Differentiate between one-dimensional andmulti-dimensional arrays with examples.

→ Arrays in C are collections of variables of the same data type, stored in contiguous memory locations.

→ One-Dimensional Arrays

→ Definition: A one-dimensional array is a linear list of elements. It can be visualized as a single row of values.

→ Syntax:

→ data_type array_name[array_size];

→ Example:

→ int numbers[5]; // Declaration of a one-dimensional array of integers

→ // Assigning values

→ numbers[0] = 10;

→ numbers[1] = 20;

→ numbers[2] = 30;

→ **Function Call :**

→ **Purpose:** Executes the function by using its name and passing the required arguments.

→ **Syntax:**

→ function_name(arguments);

→ **Example:**

→ int main() {

→ int result = add(5, 3); // Calling the 'add' function

→ printf("The sum is: %d\n", result); // Output: The sum is: 8

→ return 0;

→ }