* concept of arrays in C. Differentiate between one-dimensional and multi-dimensional arrays with examples
* Concept of Arrays in C: -An **array** in C is a collection of **variables of the same data type** stored **contiguously in memory**. It allows storing multiple values under a **single variable name**, and each value can be accessed using its **index**.

Difference Between 1D and Multi-Dimensional Arrays

| **Feature** | **One-Dimensional Array** | **Multi-Dimensional Array** |
| --- | --- | --- |
| Structure | Linear (single row) | Tabular (rows and columns) |
| Declaration Example | int arr[5]; | int arr[2][3]; |
| Access Syntax | arr[index] | arr[row][column] |
| Storage Representation | List of elements | Matrix or table |
| Use Case | Storing lists (marks, prices) | Storing tables (matrix, grids) |