

## Agenda

- Revision
- static
- Array
- enum
- menu driven

## Multi Dimension Array

```
// multi dimension array
int main()
{
    //int arr[][3] = {10, 20, 30, 40, 50, 60};
    int arr[2][3] = {10, 20, 30, 40, 50, 60};
    for (int i = 0; i < 2; i++)
        for (int j = 0; j < 3; j++)
            cout << arr[i][j] << ",";
    cout << endl;
    return 0;
}

// multi dimension array with Dynamic memory allocation
int main2()
{
    int **arr = new int *[2];
    arr[0] = new int[3]{10, 20, 30};
    arr[1] = new int[3]{40, 50, 60};

    for (int i = 0; i < 2; i++)
        for (int j = 0; j < 3; j++)
            cout << arr[i][j] << ",";
    cout << endl;
    delete[] arr[0];
    delete[] arr[1];
    delete[] arr;
    return 0;
}
```

## enum

- Enumeration (Enumerated type) is a user-defined data type that can be assigned some limited values. These values are defined by the programmer at the time of declaring the enumerated type.
- Enums provide a way to define symbolic names for sets of integers, making the code more readable and maintainable.

```
#include <iostream>

// Define an enum named Color
enum Color {
    RED,    // 0
    GREEN,  // 1
    BLUE    // 2
};

int main() {
    // Declare a variable of type Color
    Color myColor = GREEN;

    // Check the value of myColor
    if (myColor == GREEN) {
        cout << "The color is green." << endl;
    } else {
        cout << "The color is not green." << std::endl;
    }
    return 0;
}
```