

Array in c++

An Array is a data structure used to store blocks of information in contiguous memory allocation The data can be integer strings characters class objects etc

Declaring an Aa

```
//Syntax
//<data_type> Name[size]
int intArray[100];
char characterArray[100];
```

Getting started with array

```
#include <iostream>

int main() {
    // Define an array
    int arr[] = {1, 2, 3, 4, 5};

    // Calculate the size of the array
    int arrSize = sizeof(arr) / sizeof(arr[0]);

    // Iterate over the elements of the array
    for (int i = 0; i < arrSize; ++i) {
        std::cout << "Element " << i << ": " << arr[i] << std::endl;
    }

    return 0;
}
```

Finding Max and Min element

Step Taking the input n and declaring an Integer Array of size n

Step Iterating the Array and calculating the maximum and minimum elements

```
int n;  
cin >> n;  
  
int arr[n];  
for (int i = 0; i < n; i++) {  
    cin >> arr[i];  
}  
  
int maxNo = INT_MIN;  
int minNo = INT_MAX;  
  
for (int i = 0; i < n; i++) {  
    maxNo = max(maxNo, arr[i]);  
    minNo = min(minNo, arr[i]);  
}  
  
cout << maxNo << " " << minNo << endl;
```

Practice

[Running sum of an Array](#)

[Kids with the greatest number of candies](#)



You

sum of array all elements



ChatGPT

Certainly! To calculate the sum of all elements in an array in C++, you can iterate over each element of the array and add them up. Here's how you can do it:

cpp

Copy code

```
#include <iostream>

int main() {
    // Define an array
    int arr[] = {1, 2, 3, 4, 5};

    // Calculate the size of the array
    int arrSize = sizeof(arr) / sizeof(arr[0]);

    // Initialize a variable to hold the sum
    int sum = 0;

    // Iterate over the elements of the array and calculate the sum
    for (int i = 0; i < arrSize; ++i) {
        sum += arr[i];
    }

    // Output the sum
    std::cout << "Sum of array elements: " << sum << std::endl;

    return 0;
}
```