

Arrays

Declaring the size of the array:

It's important when declaring the size of our array, we want to make sure that the size does not change, so we use the keyword 'const' to ensure it does not change. Also, the variable we used 'SIZE' is in all caps, this is just a notation for constant variables, but it's not required, but highly recommended.

```
const int SIZE = 6;
```

Declaring the array with an initialization list:

When declaring an array, we use the '[]' next to our variable for our array name 'arr', to indicate that it is an array. We can initialize the array using the '{}', just like the example below.

```
int arr1[SIZE] = {1, 2, 3, 4, 5, 6};
```

Inputting our own values into our array:

This example uses user input.

```
const int SIZE = 6;
int arr2[SIZE];
for(int i = 0; i < SIZE; i++) {
    cin >> arr2[i];
    cin.ignore();
}
```

Displaying the contents of the array:

```
for(int i = 0; i < SIZE; i++) {  
    cout << arr2[i] << ' ';  
}  
cout << endl;
```

Calling Arrays with functions:

Let's say we have the following function, notice when we call the function we don't use '[]', since the '[]' is the declaration of an array.

```
void display(int a[], int n) {  
    for(int i = 0; i < n; i++) {  
        cout << a[i] << ' ';  
    }  
    cout << endl;  
}  
  
int main() {  
    const int SIZE = 6;  
    int arr[SIZE] = {1,2,3,4,5,6};  
    display(arr, SIZE);  
}
```