

Built-in arrays

Exercises

- Describe what is meant by a built-in array in C++
- Give one example of how built-in array differs from `std::vector`

- Convert the code below into a full working program. Experiment with printing and assigning different elements until you are confident with it

```
int a[] = {1, 2, 3, 4, 5};  
cout << a[0];  
cout << a[3];  
a[2] = 6;  
for (int i = 0; i < 5; ++i)  
    cout << a[i] << ", ";
```

- What happens if you use `auto` instead of `int` in the array definition?

- Are the following statements legal C++? If they are legal, what will happen when they are executed?

```
int a[] = {1, 2, 3, 4, 5};
```

```
cout << a[-2];
```

```
a[20] = 0;
```

```
int c[5];
```

```
cout << c[3];
```

- Write a program to show that printing the name of a built-in array gives the same result as printing the address of its first element
- Write a program which tries to assign one array to another

- Give some advantages of built-in arrays compared to `std::vector`
- Give an advantage of built-in arrays compared to `std::array`

- Give some disadvantages of arrays compared to `std::vector`
- Give some disadvantages of arrays compared to `std::array`