

# Arrays

## Exercises

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

- Convert the code below into a full working program. At the end of the program, print out the elements of a and b
- Experiment with printing and assigning different elements until you are confident with it

```
std::array<int, 5> a {1, 2, 3, 4, 5};  
cout << a[3];  
a[2] = 6;  
std::array<int, 5> b;  
b = a;
```

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

```
std::array<int, 5> a {1, 2, 3, 4, 5};  
cout << a[-2];  
a[20] = 0;  
array<int, 5> c;  
cout << c[3];
```

- Write an equivalent program which uses `std::vector`. Does it behave differently from the `std::array` program?

- Give some advantages of `std::array` compared to `std::vector`

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