- Solution

The solution to the exercise in the previous lesson will be explained in this lesson.

WE'LL COVER THE FOLLOWING

Solution

```
#include <array>
#include <iostream>

int main(){

  std::cout << std::endl;

  std::array<int, 4> arr= {1, 2, 3, 4};

  for ( auto a: arr){ std::cout << a << " " ; }
  std::cout << std::endl;

  arr[0]=1000;
  arr[2]=5;

  for ( auto a: arr){ std::cout << a << " " ; }
  std::cout << std::endl;

  arr.at(0)= '2';
  arr.at(2)= 'c';

  for ( auto a: arr){ std::cout << a << " " ; }
  std::cout << std::endl;

  arr.at(100)= '1';
}
```

Explanation

- In line 8, we have initialized an `std::array<int>`.

- In lines 13 and 14, we replace the values in `arr` using the square bracket accessing.

- In lines 19 and 20, we replace the values in `arr` using the `at` accessing. Note that we are replacing the values with char types, so the values in `arr` are the ASCII values of `'2'` and `'c'`.

- In line 25, we are accessing beyond the bounds of `arr`. An `std::out_of_range` exception thrown when accessing out of bounds of an `std::array` using `at`.

For further information, see std::array.

The next lesson will introduce you to smart pointers in Modern C++.