Non-member size(), data() and empty()

Here, we'll discuss the functionality of these new non-member functions.

Following the approach from C++11 regarding non-member `std::begin()` and `std::end()`, C++17 brings three new functions.

```cpp
#include <iostream>
#include <vector>
template <class Container>
void PrintBasicInfo(const Container& cont) {
  std::cout << typeid(cont).name() << '\n';
  std::cout << std::size(cont) << '\n';
  std::cout << std::empty(cont) << '\n';
  if (!std::empty(cont))
    std::cout << *std::data(cont) << '\n';
}

int main() {
  std::vector<int> iv { 1, 2, 3, 4, 5 };
  PrintBasicInfo(iv);
  float arr[4] = { 1.1f, 2.2f, 3.3f, 4.4f };
  PrintBasicInfo(arr);
}
```

> **Extra Info:** These new functions are located in `<iterator>`, and the referencing paper is N4280

Head over to the next lesson to learn about the new `constexpr` features.