Array in C++

① C type array

Type name[size]; {Definition of array}

⇒ Accessing individual elements:

name[i] → i^{th} element

i: 0 to size

⇒ name is actually pointer to first elemt. (of Type)

⇒ datas are stored in stack continuously.

⇒ Array over heap

Example

```
int* another = new int[5];
delete[] another;
```

new int[5]; → {for Creating array on heap}

delete[] another; → {for deleting array}

② Std:: array

⇒ It is inside array header file

```
#include <array>
```

⇒ Declaration

```
template < class T, std::size_t N>
struct array;
```

Example

```
std::array <int, 5> another;
```

⇒ Member functions:

Element access

① at (size_type pos);
↳ with bound checking.

② operator[]
↳ No bound checking.

③ front()

④ back()

⑤ data()

Capacity

① empty()

② size()

Operations

① fill (const T& value)
↳ Assign the given value to all element in the container.