

# Vector in C++

```
#include <iostream>
#include <vector>
using namespace std;
int main()
{
    vector<int> my_numbers = {1, 2, 3};
    cout << my_numbers.size() << endl;
    my_numbers.push_back(10);
    cout << my_numbers.size() << endl;
    cout << my_numbers[0] << endl;
    cout << my_numbers.at(0) << endl;
    cout << my_numbers.at(3) << endl;
    my_numbers.pop_back();
    cout << my_numbers.size() << endl;
    my_numbers.pop_back();
    cout << my_numbers.size() << endl;
    for (int i : my_numbers)
    {
        cout << i << endl;
    }
    return 0;
}
```

```
3
4
1
1
10
3
2
1
2
```

# Passing vector to function

- Pass by value
- Pass by Reference
- Pass by Pointer

```
#include <iostream>
#include <vector>
using namespace std;
void my_function(vector<int> input)
{
    // Code...
}
int main()
{
    vector<int> my_numbers = {1, 2, 3};
    my_function(my_numbers);
    return 0;
}
```