

# Swap Function Exercises

- Briefly describe `swap()`
- What exception guarantee does it offer?
- Why is it often better to use an overloaded version (if available) than the generic version?

- Write a simple program that uses `swap()` to exchange the values of two `int` variables
- Print out the values of the variables before and after the `swap()` call
- Write another program in which the code to exchange the values is written out explicitly

- Briefly describe the overloaded `swap()` for `std::string`. Why is this more efficient than the generic version?
- In what situation is it worth overloading `swap()` for our own class?
- What factors should we consider when writing the overloaded version?

- Implement an overloaded swap function for the following class

```
class BufferManager {  
    private:  
        int size;  
        char *buffer;  
};
```