

# Pointers and Working with Dynamic Memory

Here are some common errors and mistakes that may happen if you're not careful enough:

- storage used after free,
- allocation freed repeatedly,
- insufficient space for a dynamically allocated variable,
- freeing unallocated storage,
- freeing of the stack space,
- memory leakage,
- assignment of incompatible types,
- returning (directly or via an argument) of a pointer to a local variable,
- dereference of wrong type,
- dereference of uninitialized or invalid pointer,
- incorrect use of pointer arithmetic,
- array index out of bounds