**Programming Assignment 7**

1. What is the difference between std::malloc and std::calloc in terms of dynamically allocated memory space?

2. What is the purpose of std::realloc?

3. What is a memory leak?

4. What is dynamic memory fragmentation?

5. How does std::free know the number of bytes to free your memory allocated from std::malloc? For example:

auto ptr = std::malloc(1024); // allocate 1024 bytes from the heap

std::free(ptr); // release 1024 bytes pointed by ptr