

# SAIL: Assignment 7

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**Student Name:**

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**Reading Assignment:** C++ Primer, 5th edition

- Chapter 7 – Classes

**True or False:**

1. **0.5 pt** – Objects that are `const`, and references or pointers to `const` objects, may call only `const` member functions.
2. **0.5 pt** – The compiler generates a default constructor automatically only if a class declares no constructors.
3. **0.5 pt** – Members defined after a `private` specifier are accessible to the member functions of the class but are not accessible to code that uses the class.
4. **0.5 pt** – Friends are special members of a class.
5. **0.5 pt** – A class must declare as a friend each function in a set of overloaded functions that it wishes to make a friend.
6. **0.5 pt** – The `explicit` keyword, when applied, must appear during the constructor declaration and the construction definition when the latter is made outside the class body.
7. **0.5 pt** – Class members that are not initialized in the initializer list are default initialized.
8. **0.5 pt** – A `static` member function can employ the `this` pointer.

**Short Questions:**

1. **1 pt** – Explain the concept of data abstraction.
2. **1 pt** – What is the difference between `struct` and `class`?
3. **1 pt** – Explain how class definitions are processed.
4. **1 pt** – What is the purpose of a constructor?
5. **1 pt** – What is the role of the keyword `explicit` when applied to a constructor?
6. **1 pt** – What is a `static` class member?