

# DAILY ASSESSMENT FORMAT

Course:	C++	Name:	Sachin Krishna Moger
Link :	<a href="https://www.sololearn.com/">https://www.sololearn.com/</a>	USN:	4AL17EC103
Org By:	SOLOLEARN	Semester & Section:	6-B
Github Repository:	Sachin-Courses	Date:	26/06/2020

## Topic Completed Today

The screenshot shows the Sololearn website interface. At the top, there's a navigation bar with the Sololearn logo, a 'More On Classes' link, and a user profile section for 'Sachin Krishna Moger' with a profile picture, email 'nksachin99@gmail.com', and links for 'Reset' and 'Sign out'. The main content area displays a grid of 12 topic cards, each representing a completed C++ topic. Each card shows the topic name, a progress indicator (e.g., 1/10, 2/10), the number of questions completed (e.g., 4 questions, 6 questions), and a green checkmark indicating completion. The topics are: Separate Files for Classes (1/10, 4 questions), Destructors (2/10, 6 questions), Selection Operator (3/10, 5 questions), Const Objects (4/10, 4 questions), Member Initializers (5/10, 4 questions), Composition, Part 1 (6/10, 3 questions), Composition, Part 2 (7/10, 3 questions), The Friend Keyword (8/10, 3 questions), The This Keyword (9/10, 4 questions), Operator Overloading (10/10, 4 questions), and Module 6 Quiz (7 questions). The bottom right corner of the page shows the copyright notice '© 2020 SoloLearn Inc.'.

Topic	Progress	Questions	Status
Separate Files for Classes	1/10	4 questions	✓
Destructors	2/10	6 questions	✓
Selection Operator	3/10	5 questions	✓
Const Objects	4/10	4 questions	✓
Member Initializers	5/10	4 questions	✓
Composition, Part 1	6/10	3 questions	✓
Composition, Part 2	7/10	3 questions	✓
The Friend Keyword	8/10	3 questions	✓
The This Keyword	9/10	4 questions	✓
Operator Overloading	10/10	4 questions	✓
Module 6 Quiz		7 questions	✓

The main purpose of C++ programming is to add object orientation to the C programming language and classes are the central feature of C++ that supports object-oriented programming and are often called user-defined types.

A class is used to specify the form of an object and it combines data representation and methods for manipulating that data into one neat package. The data and functions within a class are called members of the class.

## C++ Class Definitions

When you define a class, you define a blueprint for a data type. This doesn't actually define any data, but it does define what the class name means, that is, what an object of the class will consist of and what operations can be performed on such an object.

A class definition starts with the keyword `class` followed by the class name; and the class body, enclosed by a pair of curly braces. A class definition must be followed either by a semicolon or a list of declarations. For example, we defined the `Box` data type using the keyword `class` as follows –

```
class Box {  
    public:  
        double length; // Length of a box  
        double breadth; // Breadth of a box  
        double height; // Height of a box  
};
```

The keyword `public` determines the access attributes of the members of the class that follows it. A public member can be accessed from outside the class anywhere within the scope of the class object. You can also specify the members of a class as private or protected which we will discuss in a subsection.

## Define C++ Objects

A class provides the blueprints for objects, so basically an object is created from a class. We declare objects of a class with exactly the same sort of declaration that we declare variables of basic types. Following statements declare two objects of class `Box` –

```
Box Box1;    // Declare Box1 of type Box  
Box Box2;    // Declare Box2 of type Box
```

Both of the objects `Box1` and `Box2` will have their own copy of data members.