

Daily Assessment format

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course: c++ programming

Topic: challenges
• certificate

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Report

forenoon session details

- C++ is a statically typed, compiled, general purpose, case sensitive, free from programming language that supports procedural, object oriented & generic programming
- C++ is regarded as a middle level language as it comprises a combination of both high level & low level language features.
- C++ was developed by Bjarne Stroustrup starting in 1979 at Bell Labs in Murray Hill, New Jersey, as an enhancement to the C language & originally named C with classes but later it was renamed C++ in 1983.

Note

- A programming language is said to use static typing when type checking is performed during compile time as opposed to run-time. OOP C++ fully supports object oriented programming, including the four pillars of object oriented development
 - Encapsulation
 - Data hiding
 - Inheritance
 - Polymorphism
 - Standard libraries
- Standard C++ consists of three important parts -

- The core language giving all the building blocks including variables, data types & literals, etc
- The C++ standard library giving a rich set of functions manipulating files, strings, etc
- The standard template library (STL) giving a rich set of methods manipulating data structures, etc

The ANSI standard

- The ANSI standard is an attempt to ensure that C++ is portable, that code you write for Microsoft's compiler will compile without errors, using a compiler on Mac Unix, a Windows box, or an alpha. The ANSI standard has been stable for a while, & all the major C++ compiler manufacturers support the ANSI standard.

Learning C++

- The most important thing while learning C++ is to focus on concepts. The purpose of learning a programming language is to become a better programmer; that is to become more effective at designing & implementing new systems & at maintaining old one.
- C++ supports a variety of programming styles. You can write in the style of Fortran, C, Smalltalk, etc.

Use of C++

- C++ is used by hundreds of thousands of programmers in essentially every application domain.
- C++ is being highly used to write device drivers & other software that rely on direct manipulation of hardware under real-time constraints.