Compile time vs Runtime

Compile-time and Runtime are the two programming terms used in the software development. Compile-time is the time at which the source code is converted into an executable code while the run time is the time at which the executable code is started running. Both the compile-time and runtime refer to different types of error.

### **Compile-time errors**

Compile-time errors are the errors that occurred when we write the wrong syntax. If we write the wrong syntax or semantics of any programming language, then the compile-time errors will be thrown by the compiler. The compiler will not allow to run the program until all the errors are removed from the program. When all the errors are removed from the program, then the compiler will generate the executable file.

The compile-time errors can be:

* Syntax errors
* Semantic errors

The semantic errors exist when the statements are not meaningful to the compiler.