

Differences between object oriented programming language and procedural programming language:

S.no.	On the basis of	Procedural Programming	Object-oriented programming
1.	Definition	It is a programming language that is derived from structure programming and based upon the concept of calling procedures. It follows a step-by-step approach in order to break down a task into a set of variables and routines via a sequence of instructions.	Object-oriented programming is a computer programming design philosophy or methodology that organizes/ models software design around data or objects rather than functions and logic.
2.	Security	It is less secure than OOPs.	Data hiding is possible in object-oriented programming due to abstraction. So, it is more secure than procedural programming.
3.	Approach	It follows a top-down approach.	It follows a bottom-up approach.
4.	Data movement	In procedural programming, data moves freely within the system from one function to another.	In OOP, objects can move and communicate with each other via member functions.
5.	Orientation	It is structure/procedure-oriented.	It is object-oriented.
6.	Access modifiers	There are no access modifiers in procedural programming.	The access modifiers in OOP are named as private, public, and protected.
7.	Inheritance	Procedural programming does not have the concept of inheritance.	There is a feature of inheritance in object-oriented programming.
8.	Code reusability	There is no code reusability present in procedural programming.	It offers code reusability by using the feature of inheritance.
9.	Overloading	Overloading is not possible in procedural programming.	In OOP, there is a concept of function overloading and operator overloading.

10.	Importance	It gives importance to functions over data.	It gives importance to data over functions.
11.	Virtual class	In procedural programming, there are no virtual classes.	In OOP, there is an appearance of virtual classes in inheritance.
12.	Complex problems	It is not appropriate for complex problems.	It is appropriate for complex problems.
13.	Data hiding	There is not any proper way for data hiding.	There is a possibility of data hiding.
14.	Program division	In Procedural programming, a program is divided into small programs that are referred to as functions.	In OOP, a program is divided into small parts that are referred to as objects.
15.	Examples	Examples of Procedural programming include C, Fortran, Pascal, and VB.	The examples of object-oriented programming are - .NET, C#, Python, Java, VB.NET, and C++.