**Difference between Procedural and Object-Oriented Programming**

**Procedural Programming:** can be defined as a programming model which is derived from structured programming, based upon the concept of calling procedure. Procedures, also known as routines, subroutines or functions, simply consist of a series of computational steps to be carried out. During a program’s execution, any given procedure might be called at any point, including by other procedures or itself.

| Procedural Oriented Programming |  |  | Object Oriented Programming |
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| In procedural programming, program is divided into small parts called ***functions***. |  |  | In object-oriented programming, program is divided into small parts called ***objects***. |
| Procedural programming follows ***top-down approach***. |  |  | Object oriented programming follows ***bottom-up approach***. |
| There is no access specifier in procedural programming. |  |  | Object oriented programming have access specifiers like private, public, protected etc. |
| Adding new data and function is not easy. |  |  | Adding new data and function is easy. |
| Procedural programming does not have any proper way for hiding data, so it is ***less secure***. |  |  | Object oriented programming provides data hiding so it is ***more secure***. |
| In procedural programming, overloading is not possible. |  |  | Overloading is possible in object-oriented programming. |
| In procedural programming, function is more important than data. |  |  | In object-oriented programming, data is more important than function. |
| Procedural programming is based on ***unreal world***. |  |  | Object oriented programming is based on ***real world***. |

**Object Oriented Programming:** can be defined as a programming model which is based upon the concept of objects. Objects contain data in the form of attributes and code in the form of methods. In object-oriented programming, computer programs are designed using the concept of objects that interact with real world. Object oriented programming languages are various, but the most popular ones are class-based, meaning that objects are instances of classes, which also determine their types.