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| **C** | **C++** |
| C was developed by **“Dennis Ritchie “** IN 1972 at AT&T Bell Labs. | C++ was developed by “**Bjarne Stroustrup”** in 1980’S with C++'s predecessor "C with Classes". |
| When compared to C++, C is a subset of C++. | C++ is a superset of C. C++ can run most of C code while C cannot run C++ code. |
| C supports procedural programming paradigm for code development. | C++ supports both procedural and object oriented programming paradigms; therefore C++ is also called a hybrid language. |
| C does not support object oriented programming; therefore it has no support for polymorphism, encapsulation, and inheritance. | Being an object oriented programming language C++ supports polymorphism, encapsulation, and inheritance. |
| In C (because it is a procedural programming language), data and functions are separate and free entities. | In C++ (when it is used as object oriented programming language), data and functions are encapsulated together in form of an object. |
| In C, data are free entities and can be manipulated by outside code. This is because C does not support information hiding. | In C++, Encapsulation hides the data to ensure that data structures and operators are used as intended. |
| C, being a procedural programming, it is a function driven language. | While, C++, being an object oriented programming, it is an object driven language. |
| C does not support function and operator overloading. | C++ supports both function and operator overloading. |
| C does not allow functions to be defined inside structures. | In C++, functions can be used inside a structure. |
| C uses functions for input/output. For example scanf and printf. | C++ uses objects for input output. For example cin and cout. |
| C does not support reference variables. | C++ supports reference variables. |
| C has no support for virtual and friend functions. | C++ supports virtual and friend functions. |
| C does not provide direct support for error handling (also called exception handling) | C++ provides support for exception handling. Exceptions are used for "hard" errors that make the code incorrect. |
| C follows Top-Down approach in program design | C++ follows Bottom-Up approach in program design |