Sr No.	Parameters	C	Java
1.	**Language Type**	C is a Procedure Oriented programming language (POP).	Java is an Object-Oriented Programming Language (OOP).
2.	**Developer**	Dennis Ritchie	James Gosling, Patrick Naughton, Chris Warth, Ed Frank & Mike Sheridan at Sun Microsystems in 1991.
3.	**Language Level**	C is a Middle Level language.	Java is a high-level language.
4.	**Evolution**	C is evolved from B, BCPL languages. It is s super set of B.	Java is neither a superset nor a subset of C & C++. It takes some features from C & C++ and also includes some new features too.
5.	**Extension**	C files have extension .c	Java files have extension .java
6.	**Execution Approach**	C used top-down approach.	Java uses bottom-up approach.
7.	**Execution Speed**	C is faster than Java	Java execution is slower than C
8.	**Platform Dependency**	C is Platform dependent Language	Java is Platform Independent Language
9.	**Platform Philosophy**	Write once, compile anywhere (WOCA)	Write once, run anywhere/ everywhere (WORA/WORE)
10.	**Program Compilation**	C programs can be compiled with variety of compilers	Java programs can be compiled using a unique compiler
11.	**Source-Code conversion**	Source Code is converted directly into machine code (executable code) by compiler	Source Code is converted into byte code by compiler, then byte code is converted into machine code by java interpreter.
12.	**Proximity to Hardware**	C is nearer to hardware than java	Does not have close interaction with Hardware
13.	**Basic Building Block**	Functions (C is function-driven)	Objects (Java is Object-Driven)
14.	**Keywords**	C contains 32 keywords	Java contains 50 keywords
15.	**Data Security**	Data is not secured.	Data is secured
16.	**Data Visibility modes**	C does not provide any data visibility mode	Java provides different data visibility modes : Public, Private and Protected.
17.	**Declaration Flexibility**	Inflexible, all variable declarations within a scope occur at the beginning of that scope	Flexible, allows the declaration of a variable anywhere in the scope
18.	**Variable Name (identifier) length**	32 characters	No such limit
19.	**Dynamic Initialization of Variables**	Does not support, a variable must be initialized using a constant expression.	Support, variable can be initialized at runtime using expression at the place of declaration.
20.	**Runtime Error handling (Exception handling)**	C does not support Exception Handling.	Java support Exception Handling.
21.	**Structures**	C supports Structure.	We can use functions inside structures in C++. .
22.	**Robust**	Not a Robust language.	Java is a Robust language.
23.	**Multi-Threading**	C does not support Multi-Threading programming.	Java support Multi-Threading programming.
24.	**Native System Library Handling**	Allow direct call to Native System libraries.	Call through the Java Native Interface and Java native Access.
25.	**Memory Management**	Manual.	Managed, using an automatic garbage collector.
26.	**Automatic Coercions**	Yes, with no warnings if loss could occur.	Not at all if loss could occur, must cast explicitly.
27.	**Sizes of primitive data types**	Varied according to the machine.	Primitive data type has fixed size that are machine independent.
28.	**Test Expression Outcome (return value)**	Test expressions for control flow constructs return an integer value(0/1) in C.	Test expressions for control flow constructs return an integer value(true/false) in Java.
29.	**Array Bounds Checking**	An array in C is not bound checked.	An array in Java is bound checked.
30.	**Call by reference**	Supported in C	Not supported in Java it only supports call by value.
31.	**Multi-Dimensional Array**	Supported in C	Not supported in Java, but it is possible to create arrays to represent multi-dimensional arrays
32.	**Goto statement**	Supported in C	Not supported in Java
33.	**Global Variables**	Supported in C	Not supported in Java
34.	**Preprocessor**	Supported in C	Not supported in Java
35.	**Modifiers : auto, extern, register, signed, unsigned**	Supported in C	Not supported in Java