

Q1: List down the important features of Java 1.8?

ans-

Some of the important Java 8 features are;

- forEach() method in Iterable interface
- default and static methods in Interfaces
- Functional Interfaces and Lambda Expressions
- Java Stream API for Bulk Data Operations on Collections
- Java Time API
- Collection API improvements
- Concurrency API improvements
- Java IO improvements

Q2: Differentiate between C, C++ & Java.

ans- Features of C Language-

- 1/ Machine independent and portable
- 2/ Modern Control Flow and Structure
- 3/ Rich set of operators
- 4/ Simple, Fast, and efficient
- 5/ Case-sensitive
- 6/ Low memory use
- 7/ Easily extendable
- 8/ Statically-typed

Features of C++ Language-

- 1/ Case-sensitive
- 2/ Compiler based
- 3/ Platform-independent
- 4/ Portability
- 5/ Dynamic memory allocation

Features of Java

- 1/ Object-oriented
- 2/ Architecture-neutral
- 3/ Platform independent
- 4/ Dynamic and Distributed
- 5/ Robust
- 6/ Secure
- 7/ Multithreaded

-BASIS-----	-C LANG-----	-----	-C++
LANG-----	-----	-JAVA-----	
-Origin	- The C language is based on BCPL.		The C++ language is based on the C language.
			The Java programming language is based on both C and C++.

-Programming Pattern-It is a procedural language.| It is an object-oriented programming language. | It is a pure object-oriented programming language.

-Approach - It uses the top-down approach. | It uses the bottom-up approach. | It also uses the bottom-up approach.

-Dynamic or Static-It is a static programming language.|It is also a static programming language.|It is a dynamic programming language.

-Code Execution- The code is executed directly.| The code is executed directly.| The code is executed by the JVM.

-Platform Dependency- It is platform dependent.| It is platform dependent. |It is platform-independent because of byte code.

-File Generation- It generates the .exe, and .bak, files.| It generates .exe

file. |It generates .class file.

-Source File Extension- The source file has a .c extension.| The source file has a .cpp extension. The source file has a .java extension.

-Pointer Concept- It supports pointer.| It also supports pointer.| Java does not support the pointer concept because of security.

-Union and Structure Datatype- It supports union and structure data types.| It also supports union and structure data types.| It does not support union and structure data types.

-Overloading- It does not support the overloading concept.| Method and operator overloading can be achieved. |Only method overloading can be achieved.

-goto Statement -It supports the goto statement.| It also supports the goto statement.| It does not support the goto statements.

-Used for- It is widely used to develop drivers and operating systems.| It is widely used for system programming.| It is used to develop web applications, mobile applications, and windows applications.

-Array Size- An array should be declared with size. For example, int num[10].| An array should be declared with size. | An array can be declared without declaring the size. For example, int num[].