1.Simple:

Java language is simple because:

- Java syntax is based on C++.
- There is no need to remove unreferenced objects because there is an Automatic Garbage Collection in Java.

2.Object-oriented:

- Java is an object-oriented programming language.
- Object-oriented programming (OOPs) is a methodology that simplifies software development and maintenance by providing some rules.

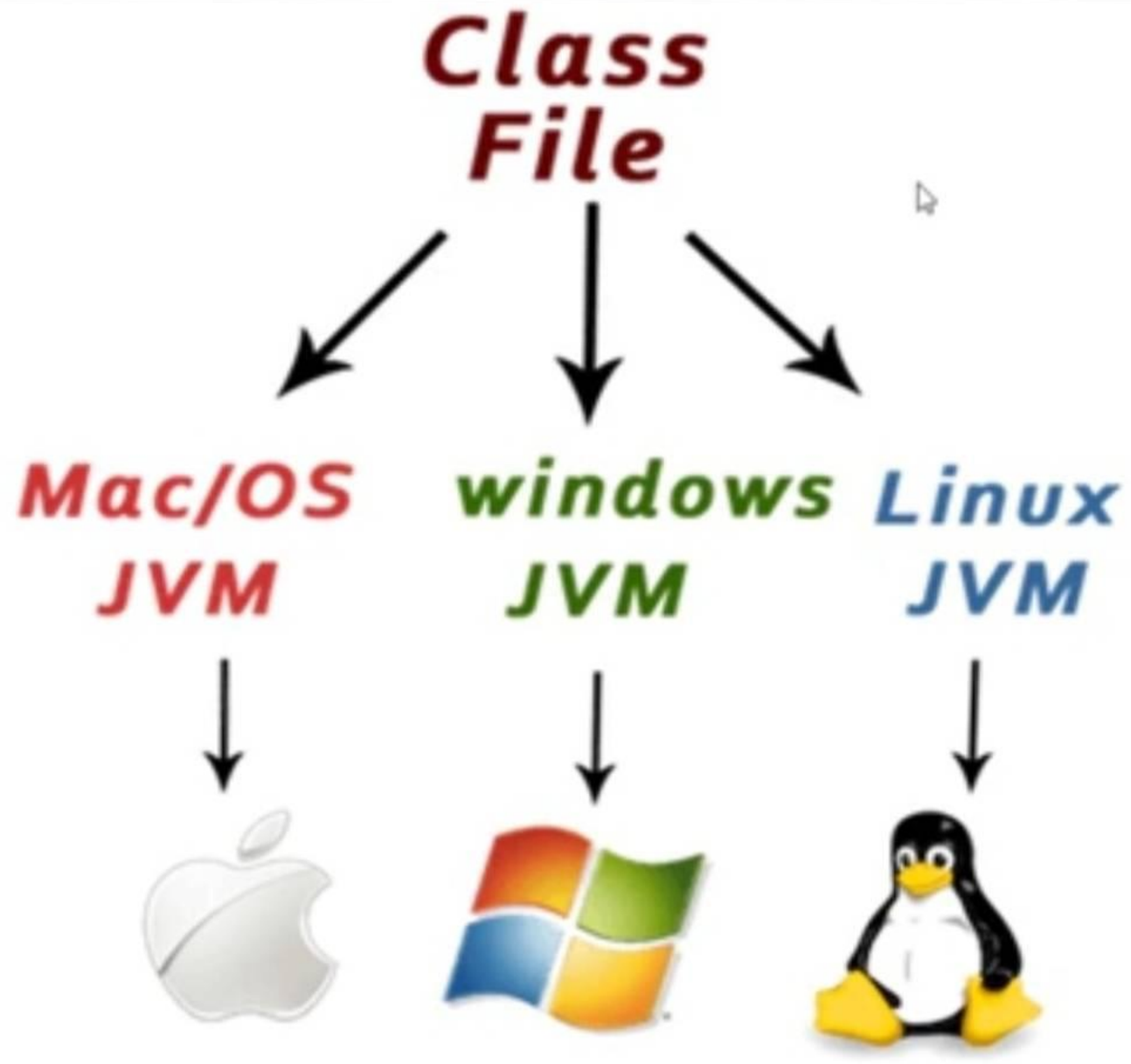
Basic concepts of OOPs are:

- Object
- Class
- Inheritance
- Polymorphism
- Abstraction
- Encapsulation

3.Platform Independent:

- Java code can be run on multiple platforms.
- There are two types of platforms.
    i. software-based
    ii. hardware-based

Java provides a software-based platform.



4. Secured:

- Java is best known for its security.
- With Java, we can develop virus-free systems.
- Java is secured because:
  - **No explicit pointer**
  - **Java Programs run inside a virtual machine sandbox**

- Java language provides these securities by default.
- Some security can also be provided by an application developer explicitly through SSL, JAAS, Cryptography, etc.

5. Robust:

Robust - Strong

Java is robust because:

- It uses strong memory management.
- There is a lack of pointers that avoids security problems.
- There is automatic garbage collection in java.

6. Architecture-neutral:

- In C programming, int data type occupies 2 bytes of memory for 32-bit architecture and 4 bytes of memory for 64-bit architecture.
- However, it occupies 4 bytes of memory for both 32 and 64-bit architectures in Java.

7. Portable:

- Java is portable because :
- We may carry the Java bytecode to any platform.
- It doesn't require any implementation.

8.Intrepreted:

It convert the source code into system understandable code call binary code (or) Machine code.

9. High-performance:

- Java is faster than other traditional interpreted programming language.
- because Java bytecode is "close" to native code.
- It is still a little bit slower than a compiled language (e.g., C++).

10. Distributed:

- We can create distributed applications in JAVA.
- RMI and EJB are used for creating distributed applications.

11. Multi-threaded:

- A thread is like a separate program, executing concurrently.
- We can write Java programs that deal with many tasks at once by defining multiple threads.

12.Dynamic:

- Java is a dynamic language.
- It supports dynamic loading of classes.
- It means classes are loaded on demand.