Misconceptions

Module-1	
Misconception 1.	**Java and JavaScript are considered to be either identical or tightlyinterconnected programming languages.**
Correct Explanation	Despite their similar names, Java and JavaScript are two independent programming languages that vary in terms of syntax, use cases, and design philosophies. Java is often used for the purpose of application development, while JavaScript is mostly utilised as a scripting language in the realm of webdevelopment.
Misconception 2.	**The concept of "write once, run anywhere" in Java implies that Java programmes will exhibit consistent appearance and performance acrossall platforms.**
Correct Explanation	The slogan of Java refers to its ability to achieve platform independence at thelevel of bytecode. Nevertheless, the visual and operational aspects of Java programmes may vary on different platforms as a result of variables such as system resources or the specific implementation of the Java Virtual Machine(JVM).
Misconception 3.	**In Java, it is observed that all data types have equal**

	memory occupancy.
Correct Explanation	Various data types in the Java programming language use different quantitiesof memory. As an example, an integer data type often utilises 32 bits, but a double data type generally employs 64 bits.
Misconception 4.	**In Java, using more variables means a program will run slower.**
Correct Explanation	The runtime speed of a programme is not directly influenced by the amount of variables. Nevertheless, an abundance of superfluous variables might leadto an escalation in memory consumption. The efficiency of a programme is often influenced by the choice of algorithms and logical constructs used, rather than only by the quantity of variables utilised.
Misconception 5.	**Java is mostly used in the development of online applets and desktopapplications.**
Correct Explanation	Java has a wide array of applications. Although first gaining popularity for itsusage in applets, Java has also been extensively used in several domains suchas web server applications, Android app development, big data technologies, and even embedded devices.