Java compilers can prevent users from using uninitialized variables and creating unreachable statements. It is also a late-binding language. Java can also automatically designated memory needed during runtime and also dispose of it by default, making it more manageable than C or C++. Java uses a garbage collector that runs in the background. References are Java’s safe kind of pointer. Objects in Java are accessed through references. Protection of references are one major part of Java’s security. Java arrays can be allocated and assigned. They have a defined value given by the user and cannot be extended or decreased in length. Java can also deal with exceptions using try and catch, making it easier for the user to know which exceptions to expect. Classes are small, modular components. Packages are a layer of structure that groups classes into functional units. Classes can either be public or protected from outside access. Packages help in designing scalable applications. Encapsulation means to hide data and behavior in a class. It helps users to write neatly organized software. Bytecode verifier reads bytecode before it runs to make sure it works properly and follows the rules of the Java language. Class loaders bring the bytecode for classes into the interpreter.