

Name: Fardin Khan Nur

Id: 12421038

Semester: 4th

Section: A

Java Keywords – Table Format

| Keyword | Explanation |
|------------|--|
| abstract | Used with classes or methods. An abstract class cannot be used to create objects. Any abstract method must be overridden in the child class. |
| class | Used to define a class. A class acts as a template for creating objects and contains data members and functions. |
| extends | Used by a child class to inherit another class. It supports single inheritance and helps reuse existing code. |
| import | Used to bring classes from other packages into the program. It improves code structure and avoids writing long class names. |
| const | A reserved keyword in Java but not implemented. Using it causes a compile-time error. The <code>final</code> keyword is used instead. |
| final | Used to prevent changes. Final variables cannot be modified, and final methods cannot be overridden. |
| catch | Used to handle exceptions. It follows a try block and prevents the program from terminating unexpectedly. |
| continue | Skips the remaining code of the current loop iteration and moves control to the next iteration. |
| break | Skips the remaining code of the current loop iteration and moves control to the next iteration. |
| implements | Used by a class to apply an interface. The class must provide implementations for all |

| | |
|-----------|---|
| | interface methods and allows multiple inheritance. |
| interface | Used to achieve abstraction. It contains abstract methods that are implemented by classes. |
| package | Used to group related classes and interfaces together. It helps avoid name conflicts and keeps code organized. |
| super | Refers to parent class object. Calls parent constructor or methods. Accesses overridden members. |
| throw | Used to manually generate an exception. It can be used with both built-in and user-defined exceptions. |
| new | Used to create a new object. It allocates memory dynamically and invokes the constructor. |
| public | An access modifier that allows access from anywhere in the program. It has the widest visibility. |
| this | Refers to the current object. It helps distinguish instance variables from local variables and can call another constructor. |
| try | Used to enclose code that may cause an exception. It must be followed by catch or finally blocks for handling errors. |
| finally | A block that always executes after try-catch. It is commonly used for cleanup operations, regardless of exceptions. |
| protected | Allows access within the same package or through inheritance. It is more restrictive than public. |
| static | Belongs to the class rather than an object. Static members are shared among all objects and can be accessed without creating an object. |
| short | A 16-bit integer data type. Its value range is from -32,768 to 32,767. |
| long | A 64-bit integer data type. It is used when very large numerical values are required. |