

## Lesson 2: Concepts of Java Programming

1. **Packages**- it is like a folder in a directory where we can put all our related codes in the same directory
2. Every word in the *public static void main* statement has a meaning in the JVM (Java's main() method)
  - **Public**- an Access specifier/modifier, which specifies from where and who can access the method; Making the main() method public makes it globally available, If the main method is not public, it's access is restricted
  - **Static**- The main() method is static so that JVM can invoke it without instantiating the class. This also saves the unnecessary wastage of memory which would have been used by the object declared only for calling the main() method by the JVM. If you try to run Java code where main is not static, you will get an error
  - **Void**- It is a keyword and is used to specify that a method doesn't return anything. If main method is not void, we will get an error
  - **Main**- It is the name of the Java main method. It is the identifier that the JVM looks for as the starting point of the Java program. It's not a keyword.
  - If we change the name while initiating the main method, we will get an error.
3. **System.out.println();** - used to display something in the console
  - System is a class
  - Out is an object defined in the System class
  - println() is a method (methods are always followed by parentheses)
4. **System.out.print()**- used to display something in the console in the SAME LINE
  - Using '\n' will put the succeeding line in the next line
5. Class name should start in uppercase
6. Semicolon **ALSO KNOWN AS TERMINATOR** ';' is used to end a Java statement
7. 3 different styles of commenting:
  - Single line style marked with two slashes- //
  - Multiple line style- /\*(open) \*/(close)
  - Javadoc style- /\*\*(open) \*/(close)