**Chapter 1 Review Questions**

What is source code? Give an example

Based off an explanation in class source code is the java file that we engineers create which can be compiled to byte code to be executed on JVM. An example of source code is

public class HelloWorld {

public static void main(String[] args) {

System.out.println(“Hello, World!”);

}

}

What is byte code? Give an example

Based off of a video from Professor Lupoli called “What is a Bytecode and Machine Code?” bytecode is technically a type of machine code, but it is not binary. It is machine code built for the JVM (Java Virtual Machine). An example is the .class file that was compiled from Java code using the command.

What is a compiler? Give an example

As stated on page 3 of the textbook a compiler is an application that translates a program from the Java language to a language more suitable for execution on the computer. An example of a compiler for Java is javac.

What is IDE? Give an example

Based off of Amazon web services an IDE (Integrated Development Environment) is a software application that helps programmers develop software code efficiently. It increases developer productivity by combining capabilities such as software editing, building, testing, and packaging in an easy-to-use application. An example of an IDE is the one we use IntelliJ IDEA.

What is runtime? Give an example

According to Amazon web services a runtime (Java Runtime Environment (JRE)) is software that Java programs require to run correctly. The JRE is the underlying technology that communicates between the Java program and the operating system. It acts as a translator and facilitator, providing all the resources so that once you write Java software, it runs on any operating system without further modifications. An example of a runtime is the JVM.