**LEC 01 INTRODUCTION TO THE FRAMEWORKS**

* What is the difference between **JDK** and **JRE**?

1. The **JRE** is the **Java Runtime Environment**. It is a package of everything necessary to run a compiled Java program, including the Java Virtual Machine (JVM), the Java Class Library, the java command, and other infrastructure.
2. The **JDK** is the **Java Development Kit**, the full-featured SDK for Java. It is capable of creating and compiling programs.

**Programming paradigms**

**• Non-structured programming**

•Earliest paradigm

•A series of code

•Flow control with GOTO statements

•Becomes complex (line increased)

•E.g. BASIC, Fortran, COBOL

**• Structured programming**

* Block structured (functional) programming

1. Origins from Lambda calculus
2. Output of the function depends on input
3. Execution of a function does not affect the global state of the system

* Object Oriented programming

**•Event-driven programming**

* **PROCEDURAL PROGRAMMING**

1. structure the code using blocks called procedures, routines, sub-routines, functions,methods

* **Some paradigms can be classified into multiple categories**

**E.g. OOP is structured and Imperative language**