1. **Session 3: Class and Object.**

2. **Intended Learning Outcome:**
   a. Learn about 3 basic paradigm of Object Oriented Programming.
   b. Learn about **Class** and **Object** and constructor.

3. **Expected skills:**
   - Can explain the basic paradigm of OOP.
   - Will know the basic Idea of Encapsulation and detect encapsulation in a model.
   - Will be able to describe what inheritance is.
   - Will know the idea of Polymorphism.

4. **Tools Required:**
   a. JDK
   b. ECLIPSE / NETBEANS

5. **Session Detail:**
   1. Teacher will talk about 3 basic paradigm of OOP – Encapsulation, Inheritance and Polymorphism.
   2. Teacher will give lecture on class and object and constructor.
   3. Teacher will give basic lecture on UML diagram.
   4. Teacher will draw some basic UML class diagram for practicing.
   5. Teacher will show object notation.

6. **Post Lab Exercise:**
   a. Write codes form UML: Exercise: 3.1, 3.2, and 3.3.
   b. Draw UMLs from code: Exercise: 3.4, 3.5.

7. **Further Readings:**
   a. https://docs.oracle.com/javase/tutorial/java/concepts/class.html
   b. http://javabeginnerstutorial.com/core-java-tutorial/java-class-object-tutorial/
   c. Prof. Dr. Syed Akhter Hossain lecture on Class and Object.
      https://www.youtube.com/watch?v=f-BAajg4NlQ