**Week-3+Week-4 Recap and Assignment Topics:**

**Below are the topics we covered so far:**

1. Arrays in Java – 1d and 2d
2. Java OOP’s concepts – class, objects, OOPs principles
3. Creating basic class and objects
4. How the new operator works?
5. What are methods and how are they created?
6. Methods that take parameters
7. Constructors and Parameterized constructors in Java
8. This keyword in Java
9. Method overloading in Java
10. Autoconversion of data types in Java
11. Call by value vs call by reference
12. Returning objects from methods
13. Recursion in Java
14. Final and static in Java
15. Nested and Inner classes
16. Class composition
17. Examples of class compostion, class validation
18. Overview of Inheritance

**Assignment Topics:**

1. Go through the programs uploaded here (<https://github.com/trainings-weblinxsolutions/batch-dec-2022/tree/master/src/classes_objects> ) and understand each of them.

2. Complete the assignments - <https://github.com/trainings-weblinxsolutions/batch-dec-2022/blob/master/src/resources/assignments/assignments.md> .

3. Practice all the programs in the class and try out new things as well

4. Go through the theory documents uploaded here https://github.com/trainings-weblinxsolutions/batch-dec-2022/tree/master/src/resources/documents

**On Monday (your Sunday night) :**

1. We will have the QnA session in which I'll be asking questions to each one of you (some theory , some practical)

2. Taking a look at the assignment programs you would have created by then.

3. Clearing any questions you have.

**Sample questions that will be asked (theory):**

1. What are the OOPs principles?

2. What is a class and object in Java?

3. What is the this keyword in Java?

4. What happens when we create an object?

5. What are constructors in Java and how you create them?.

6. ......*and other similar questions. All of the questions will be from the topics we covered in class only.*

**Sample questions that will be asked (practical):**

1. Write a simple program to create a class and create 2 objects.

2. Some programs on method executions and calls

3. Some questions around constructors.

4. Some questions around call by value, call by reference, recursion.

5. … *and other similar questions.*