**Practice Sheet (OOP Fundamentals)**

1. Consider we have two classes: A **Box** class and a **Giftcard** class.
2. These classes will have an **aggregation** form of the **association** relationship.
3. The Giftcard class should contain the names of the *sender* and *receiver* and a *message* which should be provided when an object is created.
4. Define a getter function **getMsg** that will return the message provided in the giftcard.
5. The **Box** class should store an **ArrrayList** of **Giftcards** with a maximum*capacity*or*size*.
6. This list should start out as **empty.**
7. The **Box** class should also have:
8. Three **constructors** including the **default** constructor which sets its *height*, *weight* and *width* to zero
9. **second constructor** takes the value for each property as parameter and sets the values.
10. Third constructor sets all sides equal.
11. Each box can contain a certain number of giftcard within it to parcel.
12. Define a **setter** and **getter** method for the number of giftcard a box can contain or the *capacity* of the box.
13. Include **addGiftcard** method to add a list of giftcards in the box.
14. When adding, check whether the box is already full means the length of the array is less than the capacity of the box.
15. Add a method **showGiftCards** that prints the number of giftcards stored in the box.
16. Create a separate class with **main** to create multiple objects of Giftcards and Boxes.