**Note : this file contains two tasks**

**#2 - Dependency Injection with XML Configuration - Task 1**

1. Define a new implementation for the Shape interface.
2. Define Draw2d Class and Draw3d class
3. Add new Shapes from Shape like Circle and Square .
4. Use a Draw2d Object and Draw3d Object inside the Circle and Square Classes
5. Reference your new implementation in the Spring config file (**applicationContext.xml**).
6. Apply the Constructor injection into Circle bean
7. Apply the Setter injection into Square bean
8. Retrieve a bean for Circle class and draw the Circle
9. Retrieve a bean for Square class and draw the Rectangle

**Input**:

**Output**:

Drawing a 2d for circle

Drawing a 2d for Square

**#2 - Dependency Injection with XML Configuration - Task 2**

We have a backend system that store some vehicles with two types (car , plane) . we need to store the brand of each vehicle into the database. You will take the database properties details **(url , username , password)** and store them into a properties file.

1. Define a new implementation for the Vehicle interface that contains a method for save data into database
2. Define Car Class and Plane class from Vehicle
3. Define a application.properties file that contains these values
   1. database.url = jdbc:mysql://localhost:3306/test
   2. database.username = ahmed
   3. database.password = MyPassWord123
4. Define a class that will make the database operations
5. Use a DatabaseOperation object inside car class and plane class to store their data into the database
6. Reference your new implementation in the Spring config file (**applicationContext.xml**).
7. Apply the Constructor injection into Car bean
8. Apply the Setter injection into Plane bean
9. Retrieve a bean for Car class and store the data into the database
10. Retrieve a bean for Plane class and store the data into the database