Programming in Java

LAB - 6 *Group -2/3* *25/10/13*

- Create a class **Engine** that has methods **speedUp(int)** and **speedDown(int)** that increase or decrease the speed of the motor (in RPM) with some value. It also contains **int getTorque().**
- Create a class **AerialVehicle** that contains an inner class **Engine**.
- The **AerialVehicle** has methods **speedUp()** and **speedDown()** that use engine's methods to speed up or down the car by 1, and the method **int getSpeed()**. Another two methods increaseHeight() and increaseHeight() increase or decrease the distance from ground of the aerial vehicle by 1000meters at a time.
- Keep the class in a package **vehicle**.
- Make three classes **Boeing747, Fighter** and **UFO** that import and inherit the class **AerialVehicle**. ***maxSpeed*** of **Fighter** and **UFO** should be **3x**(approx. roundoff) and **10x** of the **Boeing747** class respectively. While Boeing747 has an altitude limitation of 5000meters, Fighter and UFO has twice and 10times of this limitation
- These three classes should reside in a separate directory other than where class AerialVehicle resides.
- Supply proper Driver class to demonstrate **Boeing747, Fighter and UFO** classes.

Send your codes to: mnitlabs.apm@gmail.com
Subject Line: PiJG1L-7 *<roll_num>*