

### Question 1

Assume you are asked to implement a system to manage an online course delivering a website with OOP.

1. Create a python class with the following instance variables (Take the name of the class as “Course”)
  - Course Name – cname
  - Number of lessons – nlessons
  - Course duration -cdue
  - Number of participants – npart
2. Modify the class with an additional attribute course fee (cfee) and make both ‘npart’ and ‘cfee’ private attributes.
3. Include an additional method to the “course” which calculates the total revenue.  
(Hint: total revenue = npart x cfee)
4. Modify the class by implementing setters for “npart” & “cfee” variables.
5. Implement another class called “crashCourse” which includes the features of the “Course” class. Additionally, “Crash Course” class has “duedate” & “location” attributes.

### Question 2

Assume you are asked to implement a vehicle parking system with the use of object-oriented programming

1. Create a python class called “Vehicle” with following class variables
  - Location
  - Time – hrs
  - Rate
  - RegNo.
2. Add a method to the class which calculate the total charge.  
(Hint: total charge = hrs x rate)
3. Make the RegNo a private variable
4. Create a getter and a setter for the RegNo
5. Create another class called “Car” and include all variable and methods from the Vehicle class. Add a new attribute to the Car class called number of wheels (nwheels)