**Exercise 1:** *Create a class called employee with the following data members*

1. *empName*
2. *empId*
3. *empAge*
4. *empdesgn*
5. *empLocation*
6. *empExpInYrs*

*All these data members should be initialized using constructors. Use constructor overloading*

*and demonstrate by creating different employee objects with*

1. *Employee name alone*
2. *Employee name and id*
3. *Employee name, id and age*
4. *Employee name, id and designation*
5. *Employee name, id, age and designation*
6. *Employee name, id, age and location*
7. *Employee name, id, age and experience*
8. *Employee name, id, designation and experience*
9. *Employee name, id, designation, location and experience*
10. *Employee name, id, age, designation, location and experience*

**Exercise 2 :** *Create a class called Vehicle. Create subclasses like Truck, Bus, Car etc. Add common methods in the base class and specific methods in the corresponding class. Create a class called Road and create objects for the Truck, Car, Bus etc and display the appropriate message.*

**Exercise 3:***In the Lab Exercise 2, in the Vehicle class constructor initialize few variables like color, no of wheels, model etc. Give appropriate values for these variables from the invoking subclass.*

**Exercise 4:***In the Lab Exercise 3, create another class called City which creates an object for the Car,*

*Truck and Bus class and displays the details through a display () method in the Vehicle class.*

*The other methods and data members should not be accessible by the City class.*

**Exercise 5:***Create a class called Shape3D with the following method signatures alone, volume () and*

*surfaceArea (). Then create subclasses like Cylinder, Sphere, and Cube etc and implement*

*these methods.*

**Exercise 6 :** *You have to design a Payroll processing system for your company. There are different kinds of Employees – Regular, Contractor, Part-time.*

*Regular employees get paid a salary, no matter how many hours they work. They have an annual salary.*

*Contractors are paid an hourly rate, but if they work more than 40 hours a week, the excess is paid at ‘time and a half’ i.e hourly rate\*1.5.*

*Managers are regular employees that get paid a salary and a bonus.*

*Your program should compute the pay for all the employees. For each employee, ask the number of hours worked in a given week, display the name, and weekly pay earned.*