**Assignment on Constructor**

**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*

**Assignment on Overloading**

**Exercise 2:***Create a class called Calculator which has 4 different methods add, diff, mul and div which*

*accepts two numbers as parameters. Overload the methods such that the parameters can be*

*of the following pattern.*

1. *Both are of int data type.*
2. *Both are of double data type.*
3. *First parameter is of int data type and second parameter is of double data type.*
4. *First parameter is of double data type and second parameter is of int data type.*

*Create anobject to access these methods and invoke these methods with different type of*

*numbers and display the result in the corresponding methods.*

**Assignment on Inheritance**

**Exercise 3:***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.*

**Assignment on Polymorphism**

**Exercise 4:***Create a class called Worker. Write classes DailyWorker and SalariedWorker that inherit from Worker.Every worker has a name and a salaryrate. Write method Pay (int hours) to compute*

*the week pay of every worker. A Daily worker is paid on the basis of the number of days*

*she/he works.The salaried worker gets paid the wage for 40 hours a week no matter what the*

*actual hours are. Test this program to calculate the pay of workers.*