Day3_Polymorphism,Abstraction

DAY3:

1.Polymorphism
2.Abstraction

QUESTIONS(Theory)

1.What is mean by polymorphism?
2.Difference between method overloading and method overriding?
3.What is mean by Abstraction?
4.Difference between Abstract class and interface?
5.What is mean by abstract method?
6.Can we create object for abstract class?
7.In interface,can we make method as static?
8.In interface,can we make method as final?
9.How will achieve multiple inheritance in java,write a code for that?

QUESTIONS(Programs)

QUESTION 1:

Find the answer for below questions and tell whether it is possible or not?
I implements I
I implements C
I implements A
I extends I
I extends C
I extends A

C implements I
C implements C
C implements A
C extends I
C extends C
C extends A

A implements I
A implements C
A implements A
A extends I
A extends C
A extends A

A-abstract class
C-class
I- interface

QUESTION 2:

     Project   :EmployeeDetails
     Package   :org.emp
     Class   :Employee
     Methods   :empId()

Description
You have to overload the method empId() based on different datatype in
arguments.

QUESTION 3:

    Project   :CompanyDetails
    Package   :org.company
    Class   :CompanyInfo
    Methods   :companyName()

Description
You have to overload the method companyName() based on different Number of
arguments.

QUESTION 4:

    Project   :MyPhone
    Package   :org.phone
    Class   :Phone
    Methods   :phoneInfo()

Description
You have to overload the method phoneInfo() based on different datatype
order in arguments.

QUESTION 5:

     Project   :GreensAddress
     Package   :org.add
     Class   :GreensTech
     Methods   :greensOmr()

Description
You have to overload the method greensOmr() based on order,type,number.

QUESTION 6:

     Project   :BankDetails
     Package   :org.bank
     Class   :BankInfo
     Methods   :saving(),fixed(),deposit()

     Class   :AxisBank
     Methods   :deposit()

Description:
You have to override the method deposit in AxisBank.

QUESTION 7:

     Project   :EducationInformation
     Package   :org.edu
     Class   :Education
     Methods   :ug(),pg()

     Class   :Arts
     Methods   :bSc(),bEd(),bA(),bBA(),ug(),pg()

Description:
You have to override the method ug(),pg() in Arts.

QUESTION 8:

     Project   :UniversityInformation

```
      Package    :org.univ
      Class      :University
      Methods    :ug(),pg()

      Class      :College
      Methods    :ug(),pg()
```

Description:
ug(),pg() is just a templete in University class and You have to override
the method ug(),pg() in College class.

QUESTION 9:

```
      Project    :BikeInformation
      Package    :org.bike
      Interface :Bike
      Methods    :cost(),speed()

      Class      :Ktm
      Methods    :cost(),speed()
```

Description:
cost(),speed() is just a templete in Bike Interface and You have to
override the method cost(),speed() in Ktm class.

QUESTION 10:

```
      Project    :Computer
      Interface :HardWare
      Methods    :hardwareResources()

      Interface :Software
      Methods    :softwareResources()

      Class      :Desktop
      Methods    :desktopModel()
```

Description:
create 2 Interface and archieve multiple inheritance.