1. Create a class called **Time1224** with the following:
    a. Instance variables – hour, minute, second
    b. A three-argument constructor
    c. Methods for add and subtract two times
    d. A method to display the 12 hour time [e.g. *09:45:27 PM*]

   Put this class and **Date** class created in Assignment 2.3 in a package called **timePack** and use it in another class named **trainSchedule** with the following:

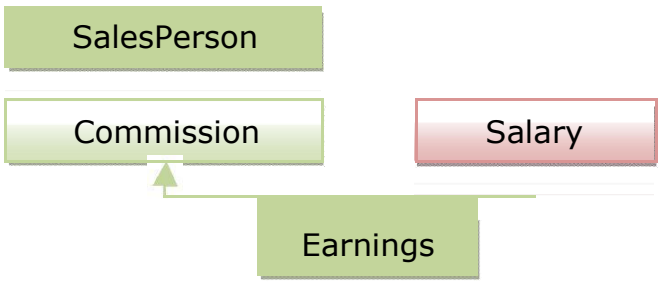
    a. Instance variables – trainNo, deptTime, arrTime, stationCode
    b. Constructors – default and parameterized
    c. A method to display the train schedule with Date and Time

   Write a JAVA program to implement all the above functionalities.

2. Create an interface called **Shape3D** with the following:
    a. Symbolic constant – PI
    b. Prototype of methods *calcVolume()* and *calcSurfaceArea()*

   Put this class in a package called **shapePack** and use it in another classes named **Parallelepiped, Cube** and **Sphere** to calculate volume and surface area for each shape.

3. An inheritance hierarchy is given as follows:



   Write a JAVA program to perform the following:

    a. Create the classes and interface for each entity shown above

b. Instance variables for **SalesPerson** – name, totalsales and a method *show()* to display them
c. Instance variable for **Salary** – basic [assign value 1000] and method – *calcSal()* [abstract]
d. Instance variable for **Commision** – commpercent and method – *calcCom()* to calculate the commission rate depending upon totalsales as given below:
    i. $0 - $200: 0% of totalsales
    ii. $201 - $500: 10% of totalsales
    iii. > $500: 20% of totalsales
e. Instance variable for **Earnings** – gross and method –
    i. *calcSal()* [abstract method of interface **Commision**] to calculate the gross earnings for a **SalesPerson**
    ii. *show()* to display the gross earning that will override the *show()* method of **SalesPerson**