Class concepts

1. Write a Python class to implement pow(x, n).
2. Write a program to find the Euclidean distance between two pints in a two dimensional space using class and objects.
3. Create a class Employee with ID, Name, Designation and Dept. Create a child class salary with Basic, HRA, DA and Allowance. Write a program to compute the net salary of the employee; assuming that HRA is 8250, DA, Allowance are 110% and 35% of the Basic salary.
4. Write a program to show the multilevel inheritance such that the multi-level inheritance should show the 50% asset distribution from grandfather to father and from father to son. The total assets of each person should be printed.
5. Write a program to show the multiple inheritance such that the multiple inheritance should show 25% asset distribution from mother and the 50% asset distribution from father to the son. The total assets of each person should be printed.
6. Let "distance" be a class. Distance is measured in terms of centimeter and meter. Perform operator overloading to find

   a. which is shorter among two given distances,

   b. what is the total distance of two given measures,

   c. What is the difference between two given measures?

7. Write a python program to create a class named Shape that contains two attributes dim1,dim2 and an empty method named printArea(). Provide two classes named Rectangle, Triangle such that each one of the classes inherit the class Shape. Each one of the classes contain the method printArea( ) that prints the area of the given shape.