

## Mini Java Applications

1. Develop a Java application to generate Electricity bill.

Create a class with the following members:

Consumer no., consumer name, previous month reading,

current month reading, type of EB connection (i.e domestic or commercial).

Compute the bill amount using the following tariff.

If the type of the EB connection is domestic, calculate the amount to be paid as follows:

- First 100 units - Rs. 1 per unit
- 101-200 units - Rs. 2.50 per unit
- 201 -500 units - Rs. 4 per unit
- If > 501 units - Rs. 6 per unit

If the type of the EB connection is commercial, calculate the amount to be paid as follows:

- First 100 units - Rs. 2 per unit
- 101-200 units - Rs. 4.50 per unit
- 201 -500 units - Rs. 6 per unit
- If > 501 units - Rs. 7 per unit

2. Develop a java application to implement currency converter (Dollar to INR, EURO to

INR, Yen to INR and vice versa), distance converter (meter to KM, miles to KM and vice

versa), time converter (hours to minutes, seconds and vice versa). Use your own required input values for conversion.

3. Develop a java application with Employee class with Emp\_name, Emp\_id, Address,

Mail\_id, Mobile\_no as members. Inherit the classes, Programmer, Assistant Professor,

Associate Professor and Professor from Employee class. Add Basic Pay (BP) as the

member of all the inherited classes with 97% of BP as DA, 10 % of BP as HRA, 12% of

BP as PF, 0.1% of BP for staff club fund. Generate pay slips for the employees with their gross and net salary.

Gross Sal = sum of all sal components

Nett Sal = Gross Sal - PF – Staff Club Fund

4. Write a Java program to create an abstract class named Shape that contains two integers and an empty method named printArea(). Provide three classes named Rectangle, Triangle, and Circle such that each one of the classes extends the class Shape. Each one of the classes contains only the method printArea() that prints the area of the given shape. Write code to calculate areas of all 3 shapes. In main method call all the shapes printArea(), pass corresponding parameters required to calculate respective areas. Finally display areas of all the shapes.