Algorithm

Aim: To print the telephone bill for a customer using Inheritance

1). Start

2). Super class data members

a).String name;
String address;
int telno;
double rent;

3). Derived class data members

int n;
double amt;

4). Detail(String name , String address, int telno, double rent) – Super class Parameterized constructor to initialize data members

a). this.name = name;
this.address = address;
this.telno = telno;
this.rent = rent;

5). Bill(String name, String address, int telno, double rent, int n) – Derived class Parameterized constructor to initialize data members.

a). super(name, address, telno, rent);
this.n = n;
amt = 0.0;

6). void cal() – Derived unction to calculate amount paid by user.

a). if(n<100)
amt = rent ;
else if(n<200)
amt = 0.80*n + rent;
else if(n<300)
amt = 1.0*n + rent;
else
amt = 2.0*n +rent;

7). void show() – Derived class function to display user details and call super class function.

a). super.show()

b). System.out.println("Amount to be Paid: Rs."+amt);

8). void show() – Super class function to display user details.

a). System.out.println("\nName: "+name);
System.out.println("Address: "+address);
System.out.println("Telno: "+telno);
System.out.println("Rent: "+rent);

9). main() – main function for accepting input, object creation and function execution.

a). Input the Customer name, address, phone number and total number of calls and store it in cname, caddress, ctelno, crent and cn respectively.

b). Bill b1 = new Bill(cname, caddress, ctelno, crent, cn);

c). b1.cal();
b1.show();

10). Stop