```java
package madhav;

interface Generatable{
    abstract double billGenerate(int units);
    }
class PowerBill{
    private double totalBill;
    private class Domestic implements Generatable{
        public double billGenerate(int units){
            if(units>0 && units<=100)
                totalBill=units*1.6;
            else if(units>100 && units<=200)
                totalBill=units*2.5;
            else if(units>200)
                totalBill=units*5.6;
            return totalBill;
        }
    }
     private class Commercial implements Generatable{
        public double billGenerate(int units){
            if(units>0 && units<=100)
                totalBill=units*5.6;
            else if(units>100 && units<=200)
                totalBill=units*7.5;
            else if(units>200)
                totalBill=units*20;
            return totalBill;
        }
    }
    public Generatable getDomesticBill(){
        return new Domestic();
    }
    public Generatable getCommercialBill(){
        return new Commercial();
    }
}
public class IITM_8 {

    public static String getBill(int units,String type){
            if(units<0)
                return "Invalid input for units" ;
            else if(type.equals("home")){
                PowerBill p = new PowerBill();
```

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44                return p.getDomesticBill().billGenerate(units)+"
   ";
45               }
46            else if(type.equals("shope")){
47               PowerBill p=new PowerBill();
48               return p.getCommercialBill().billGenerate
   (units)+" ";
49              }
50            else
51              return "invalid valid bill type";
52           }
53          public static void main(String args[]){
54             System.out.println(getBill(5,"home"));
55           }
56 }
57
```