```
Friday, 2 December, 2022, 9:59 PM
IITM 8.java
 1 package madhav;
 3interface Generatable{
         abstract double billGenerate(int units);
 5
 6 class PowerBill {
       private double totalBill;
 8
       private class Domestic implements Generatable{
 9
           public double billGenerate(int units) {
10
             if(units>0 && units<=100)
11
               totalBill=units*1.6;
12
             else if(units>100 && units<=200)</pre>
13
               totalBill=units*2.5;
14
             else if(units>200)
15
               totalBill=units*5.6;
16
             return totalBill;
17
           }
18
        }
19
        private class Commercial implements Generatable{
20
           public double billGenerate(int units) {
21
             if(units>0 && units<=100)
2.2
               totalBill=units*5.6;
23
             else if(units>100 && units<=200)</pre>
24
               totalBill=units*7.5;
25
             else if(units>200)
26
               totalBill=units*20;
27
             return totalBill;
2.8
           }
29
30
        public Generatable getDomesticBill() {
31
           return new Domestic();
32
33
        public Generatable getCommercialBill() {
34
           return new Commercial();
35
36}
37 public class IITM 8 {
38
39
      public static String getBill(int units, String type) {
40
               if(units<0)</pre>
41
                 return "Invalid input for units" ;
42
               else if(type.equals("home")){
43
                 PowerBill p = new PowerBill();
```

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