

OOAD LAB – 4

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Section : G

1.

Code :

```
public class 3 {  
}  
public class sparrow {  
    sparrow(){  
        System.out.println("A sparrow is flying");  
    }  
    sparrow(String name){  
        System.out.println(name + " is flying");  
    }  
    sparrow(String name,int height){  
        System.out.println(name +" is flying at height "+height + " metres.");  
    }  
    sparrow(String name,int height,int speed){  
        System.out.println(name + " is flying at height " +height+" metres and  
at speed "+speed +" metres per second.");  
    }  
    public static void main(String [] args){  
        sparrow b1 = new sparrow();  
        sparrow b2 = new sparrow("sanmat");  
        sparrow b3 = new sparrow("sanmat",500);  
        sparrow b4 = new sparrow("sanmat",500,100);  
    }  
}
```

Out put :

```
Main.java  Run  Output  Clear
1
2- public class sparrow {
3-     sparrow(){
4-         System.out.println("A sparrow is flying");
5-     }
6-     sparrow(String name){
7-         System.out.println(name + " is flying");
8-     }
9-     sparrow(String name,int height){
10-         System.out.println(name + " is flying at height "+height + " metres.");
11-     }
12-     sparrow(String name,int height,int speed){
13-         System.out.println(name + " is flying at height " +height+" metres and at
            speed "+speed +" metres per second.");
14-     }
15-     public static void main(String [] args){
16-         sparrow b1 = new sparrow();
17-         sparrow b2 = new sparrow("sanmat");
18-         sparrow b3 = new sparrow("sanmat",500);
19-         sparrow b4 = new sparrow("sanmat",500,100);
20-     }
21- }
```

```
java -cp /tmp/0BXb9SMrMn sparrow
A sparrow is flyingsanmat is flying
sanmat is flying at height 500 metres.
```

2.

Code :

```
public class bugati {

    private String make;
    private String model;
    private int year;
    private double mileage;

    bugati(String make, String model, int year, double mileage) {
        this.make = make;
        this.model = model;
        this.year = year;
        this.mileage = mileage;
    }

    public String getMake(){
        return this.make;
    }
    public String getModel(){
        return this.model;
    }
    public int getYear(){
        return this.year;
    }
}
```

```

    public double getMileage(){
        return this.mileage;
    }

    public void setMake(String make){
        this.make=make;
    }
    public void setModel(String model){
        this.model=model;
    }
    public void setYear(int year){
        this.year=year;
    }
    public void setMileage(double mileage){
        this.mileage=mileage;
    }

    public void display(){
        System.out.println("Make:"+this.make);
        System.out.println("Model:"+this.model);
        System.out.println("Year:"+this.year);
        System.out.println("Mileage:"+this.mileage);
    }

    public double cost(double distance,double costperlitre){
        return ((distance/this.getMileage()) * costperlitre);
    }
    public double cost(double costperlitre){
        return ((1/this.getMileage())*costperlitre);
    }

    public static void main(String args[]){

        bugati c1=new bugati("bugati","City",2019,16.5);
        c1.display();
        double cost1,cost2;
        cost1=c1.cost(100);
        cost2=c1.cost(200, 100);
        System.out.println("Cost to drive for a distance of 1km is "+cost1);
        System.out.println("Cost of Journey "+cost2);
    }

}

```

Out put :

Main.java	Output
<pre>1- public class bugati { 2 3 private String make; 4 private String model; 5 private int year; 6 private double mileage; 7 8- bugati(String make, String model, int year, double mileage) { 9 this.make = make; 10 this.model = model; 11 this.year = year; 12 this.mileage = mileage; 13 } 14 15- public String getMake(){ 16 return this.make; 17 } 18- public String getModel(){ 19 return this.model; 20 } 21- public int getYear(){ 22 return this.year; 23 } 24- public double getMileage(){ 25 return this.mileage; 26 }</pre>	<pre>java -cp /tmp/0BXb9SMrMn bugati Make:bugati Model:City Year:2019 Mileage:16.5 Cost to drive for a distance of 1km is 6.0606060606060606 Cost of Journey 1212.121212121212</pre>