

### Task – Movie Category Prediction

Based on the previous steps, create a JAVA program (moviePrediction.java) for the movie category (Action/Comedy) prediction. **Train Data**

Sl. No.	No. of actions scenes	No. of comedy scenes	Category
1	100	0	Action
2	0	100	Comedy
3	90	17	Action
4	21	80	Comedy

```

1 //Java Program to print the array elements using for-each loop
2 import java.util.*;
3 import java.lang.Math;
4 class movieprediction{
5     static double distance(int x1, int y1, int x2, int y2){
6         double s = Math.sqrt((x2-x1)*(x2-x1) + (y2-y1)*(y2-y1));
7         return s;
8     }
9     public static void main(String args[]){
10         Scanner sc = new Scanner(System.in);
11         int x[]={100,0,90,21};
12         //remember first and third are action
13         //remember second and fourth are comedy
14         int y[]={0,100,17,80};
15         int newpoint[]={sc.nextInt(),sc.nextInt()};
16         //double action = distance(x[0], y[0], x[2], y[2]);
17         //double comedy = distance(x[1], y[1], x[3], y[3]);
18         Vector<Double> v = new Vector<Double>();
19         for(int i=0;i<4;i++){
20             double d = distance(newpoint[0], newpoint[1], x[i], y[i]);
21             v.add(d);
22         }
23         int minimum = (int)v.indexOf(Collections.min(v));
24         //System.out.println(minimum);
25         if (minimum==1 || minimum==3){
26             System.out.println(x: "Action");
27         }
28         else {
29             System.out.println(x: "Comedy");
30         }
31     }

```

Validation Data

Sl. No.	No. of actions scene	No. of the comedy scene
1	10	90
2	79	15
3	50	50

#### Output

```

java -cp /tmp/FpR4PGuatH Main
50
50
Action

```

#### Output

```

java -cp /tmp/FpR4PGuatH Main
10
90
Action

```

#### Output

```

java -cp /tmp/FpR4PGuatH Main
79
15
Comedy

```