```java
1 package lab09;
2
3 import java.util.Scanner;
4
5 public class Test {
6     public static void main(String[] args) {
7         Circle c1 = new Circle();
8         System.out.println(c1.toString("c1"));
9
10        Circle c2 = new Circle(10);
11        System.out.println(c2.toString("c2"));
12
13        Circle c3 = new Circle(10, "blue");
14        System.out.println(c3.toString("c3"));
15
16        Figure ref = c1;
17        System.out.println(ref.toString("ref"));
18
19        Rectangle r1 = new Rectangle();
20        System.out.println(r1.toString("r1"));
21        Rectangle r2 = new Rectangle(10,20);
22        System.out.println(r2.toString("r2"));
23        Rectangle r3 = new Rectangle(30,40, "green");
24        System.out.println(r3.toString("r3"));
25
26        Triangle t1 = new Triangle();
27        System.out.println(t1.toString("t1"));
28        Triangle t2 = new Triangle(3, 5, 4);
29        System.out.println(t2.toString("t2"));
30        Triangle t3 = new Triangle(15, 51, 63, "yellow");
31        System.out.println(t3.toString("t3"));
32
33
34        System.out.println("\n\n");
35
36        int n,m,o;
37        n = getNum("How many circles: ");
38        m = getNum("How many rectangles: ");
39        o = getNum("How many triangles: ");
40        Circle[] c = new Circle[n];
41        for (int i= 0; i< c.length; i++) {
42            c[i] = new Circle(10, "red");
43        }
44
45        Rectangle[] r = new Rectangle[m];
46        for (int i= 0; i< r.length; i++) {
47            r[i] = new Rectangle(10, 20, "orange");
48        }
49
50        Triangle[] t = new Triangle[o];
51        for (int i= 0; i< t.length; i++) {
52            t[i] = new Triangle(3, 4, 5, "Magenta");
53        }
54
55        for (int i= 0; i< c.length; i++) {
56            ref = c[i];
57            System.out.println(ref.toString("circle"));
58        }
59        for (int i= 0; i< r.length; i++) {
60            ref = r[i];
61            System.out.println(ref.toString("rectangle"));
62        }
63        for (int i= 0; i< t.length; i++) {
64            ref = t[i];
65            System.out.println(ref.toString("triangle"));
66        }
67
68
69
70
71    }
```

```java
72
73     public static int getNum(String msg) {
74         Scanner s = new Scanner(System.in);
75         System.out.println(msg);
76         return s.nextInt();
77     }
78 }
79
```