

Main.java

```
1  /*
2  Polymorphism:
3  - One method, many behaviors/forms.
4
5  Runtime Polymorphism:
6  - Method is determined during execution.
7
8  Compile-time Polymorphism:
9  - Method is determined during compilation.
10
11 Constructors:
12 - Special methods to create and initialize objects.
13
14 Static Keywords:
15 - Access class data without creating an object.
16 - Data is shared by all objects.
17
18 This Keyword:
19 - Refers to the current object.
20 - Used to return the current object from a method.
21 - Used to call constructor from other constructor
22
23 */
24
25 class Polymorphism {
26     String name;
27     int age;
28     static int count;
29
30     //constructors
31     public Polymorphism(){
32         count++;
33         System.out.println("I am a constructor.");
34     }
35     public Polymorphism(String name, int age){
36         this(); //calling the upper constructor
37         this.name = name;
38         this.age = age;
39     }
40
41     void eat(){
42         System.out.println(name + " is eating");
43     }
44
45     void eat(String food){
46         System.out.println(name + " is eating " + food);
47     }
48 }
49
50 public class Main {
51     public static void main(String[] args) {
52         Polymorphism person = new Polymorphism("Ali", 22);
53         //This is an example of Polymorphism: same method name, different behaviors
```

```
54 | person.eat();  
55 | person.eat("Paratha");  
56 | System.out.println(Polymorphism.count);  
57 | }  
58 | }
```