

02_Polymorphism\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
22 */
23
24 class Polymorphism {
25     String name;
26     int age;
27     static int count;
28
29     //constructor
30     public Polymorphism(String name, int age){
31         count++;
32         System.out.println("I am a constructor.");
33         this.name = name;
34         this.age = age;
35     }
36
37     void eat(){
38         System.out.println(name + " is eating");
39     }
40
41     void eat(String food){
42         System.out.println(name + " is eating " + food);
43     }
44 }
45
46 public class Main {
47     public static void main(String[] args) {
48         Polymorphism person = new Polymorphism("Ali", 22);
49         //This is an example of Polymorphism: same method name, different behaviors
50         person.eat();
51         person.eat("Paratha");
52         System.out.println(Polymorphism.count);
53     }
```

54 | }