

# Polymorphism:

```
Main.java
1- class person{
2-     public void getfirstname(){
3-     }
4-     public void getlasstname(){
5-     }
6-
7- }
8- class employe extends person{
9-     public void getfirstname(String n){
10-         System.out.println(n);
11-     }
12-     public void getlasstname(String m){
13-         System.out.println(m);
14-     }
15-     public void getemployeeid(int d){
16-         System.out.println(d);
17-     }
18- }
19- public class main{
20-     public static void main(String[] args){
21-
22-         employe c1=new employe();
23-         c1.getfirstname("sai");
24-         c1.getlasstname("kongara");
25-         c1.getemployeeid(192365025);
26-     }
27- }
```

```
Output
java -cp /tmp/nSuTZdnCvC/main
sai
kongara
192365025

=== Code Execution Successful ===
```

```
Main.java
1- class Shape {
2-     public void getPerimeter() {
3-     }
4-
5-     public void getArea() {
6-     }
7- }
8-
9- class Circle extends Shape {
10-     public void getPerimeter(int r) {
11-         double perimeter = 2 * 3.14 * r;
12-         System.out.println("Perimeter: " + perimeter);
13-     }
14-
15-     public void getArea(int r) {
16-         double area = 3.14 * r * r;
17-         System.out.println("Area: " + area);
18-     }
19- }
20-
21- public class Main {
22-     public static void main(String[] args) {
23-         Circle c1 = new Circle();
24-         c1.getPerimeter(3);
25-         c1.getArea(3);
26-     }
27- }
```

```
Output
java -cp /tmp/6x0eGGZC7h/Main
Perimeter: 18.84
Area: 28.259999999999998

=== Code Execution Successful ===
```



The screenshot shows a Java IDE interface. On the left, a code editor displays the following Java code:

```
1 class animal{
2     public void move(){
3     }
4
5 }
6 class cheeta extends animal{
7     public void move(){
8         System.out.print("cheetha is moving speed");
9     }
10 }
11 public class main{
12     public static void main(String[] args){
13
14         cheeta c1=new cheeta();
15         c1.move();
16     }
17 }
18
```

On the right, an output window shows the command executed and the result:

```
java -cp /tmp/vNB2B6lrq5/main
cheetha is moving speed
=== Code Execution Successful ===
```

```
import java.util.*;
```

```
class Shape {
    public void area() {
        System.out.println("Shape has area");
    }
}
```

```
class Circle extends Shape {
    public double area(int r) {
        return 3.14 * r * r;
    }
}
```

```
public double perimeter(int r) {  
    return 3.14 * 2 * r;  
}  
}
```

```
class Rectangle extends Shape {  
    public int area(int h, int w) {  
        return h * w;  
    }  
  
    public int perimeter(int l, int b) {  
        return 2 * (l + b);  
    }  
}
```

```
class Triangle extends Shape {  
    public double area(int l, int b) {  
        return 0.5 * l * b;  
    }  
}
```

```
}
```

```
public int perimeter(int a, int b, int c) {  
    return a + b + c;  
}
```

```
}
```

```
public class Main {  
    public static void main(String[] args) {  
        Circle c1 = new Circle();  
        System.out.println("Circle Area: " + c1.area(2));  
        System.out.println("Circle Perimeter: " +  
c1.perimeter(2));  
  
        Rectangle r1 = new Rectangle();  
        System.out.println("Rectangle Area: " + r1.area(2, 3));  
        System.out.println("Rectangle Perimeter: " +  
r1.perimeter(2, 3));  
  
        Triangle t1 = new Triangle();
```

```
        System.out.println("Triangle Area: " + t1.area(2, 3));  
        System.out.println("Triangle Perimeter: " +  
t1.perimeter(2,3,4));  
  
    }  
}
```

## Output:

```
Circle Area: 12.56  
Circle Perimeter: 12.56  
Rectangle Area: 6  
Rectangle Perimeter: 10  
Triangle Area: 3.0  
Triangle Perimeter: 9
```