



The image shows a Visual Studio Code editor window with a Java project. The file explorer on the left shows the project structure: `code1.java` (1 x). The editor displays the following Java code:

```
1 class Shape {
2     void area() {
3         System.out.println(x:"Shape area");
4     }
5 }
6
7 class Circle extends Shape {
8     void area() {
9         System.out.println(x:"Circle area =  $\pi * r * r$ ");
10    }
11 }
12
13 class Rectangle extends Shape {
14     void area() {
15         System.out.println(x:"Rectangle area = length * breadth");
16     }
17 }
18
19 public class code1 {
20     Run | Debug
21     public static void main(String[] args) {
22         Circle c = new Circle();
23         Rectangle r = new Rectangle();
24         c.area();
25         r.area();
26     }
27 }
```

The terminal window at the bottom shows the execution output:

```
PS C:\Users\Prince> & 'C:\Program Files\Java\jdk-24\bin\java.exe' '--enable-preview' '-xx:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\Prince\AppData\Local\Temp\vscode_sws_59fba\jdt_ws\jdt.ls-java-project\bin' 'code1'
Circle area =  $\pi * r * r$ 
Rectangle area = length * breadth
PS C:\Users\Prince>
```

The status bar at the bottom indicates: Ln 9, Col 55 | Spaces: 4 | UTF-8 | CRLF | {} Java | [Icons]



File Edit Selection View Go Run Terminal Help

code1.java 1 code2.java 1 x

C:\Users\Prince> OneDrive\Documents\JAVA> code2.java code2

```
1 class Vehicle {
2     void run() {
3         System.out.println("Vehicle is running");
4     }
5 }
6
7 class Car extends Vehicle {
8     void run() {
9         System.out.println("Car is running");
10    }
11 }
12
13 class Bike extends Vehicle {
14     void run() {
15         System.out.println("Bike is running");
16     }
17 }
18
19 public class code2 {
20     public static void main(String[] args) {
21         Car c = new Car();
22         Bike b = new Bike();
23         c.run();
24         b.run();
25     }
26 }
```

Run | Debug

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\Prince> & 'C:\Program Files\Java\jdk-24\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\Prince\AppData\Local\Temp\vscode_sws_59fba\jdt_ws\jdt.ls-java-project\bin' 'code2'

Car is running
Bike is running
PS C:\Users\Prince>

Run: code1
Run: code2

Ln 26, Col 2 Spaces: 4 UTF-8 CRLF {} Java



File Edit Selection View Go Run Terminal Help Search

code1.java 1 code2.java 1 code3.java 1 X

C:\Users\Prince> OneDrive\Documents\JAVA> code3.java Employee

```
1 class Employee {
2     int id;
3     String name;
4     int salary;
5
6     Employee(int i, String n, int s) {
7         id = i;
8         name = n;
9         salary = s;
10    }
11
12    void show() {
13        System.out.println("ID: " + id + ", Name: " + name + ", Salary: " + salary);
14    }
15 }
16
17 public class code3 {
18     Run | Debug
19     public static void main(String[] args) {
20         Employee e1 = new Employee(1, "Amit", 25000);
21         Employee e2 = new Employee(2, "Neha", 30000);
22         e1.show();
23         e2.show();
24     }
25 }
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\Prince> & 'C:\Program Files\Java\jdk-24\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\Prince\AppData\Local\Temp\vscode_sws_59fba\jdt_ws\jdt.ls-java-project\bin' 'code3'

ID: 1, Name: Amit, Salary: 25000
ID: 2, Name: Neha, Salary: 30000
PS C:\Users\Prince>

Run | Debug
Run: code1
Run: code2
Run: code3

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF {} Java



VS Code interface showing a Java project named 'code4.java' with a class 'Calculator' and a main method 'main'.

```
1 class Calculator {
2     void add(int a, int b) {
3         System.out.println("Add: " + (a + b));
4     }
5
6     void sub(int a, int b) {
7         System.out.println("Subtract: " + (a - b));
8     }
9
10    void mul(int a, int b) {
11        System.out.println("Multiply: " + (a * b));
12    }
13
14    void div(int a, int b) {
15        System.out.println("Divide: " + (a / b));
16    }
17 }
18
19 public class code4 {
20     public static void main(String[] args) {
21         Calculator c = new Calculator();
22         c.add(a:10, b:5);
23         c.sub(a:10, b:5);
24         c.mul(a:10, b:5);
25         c.div(a:10, b:5);
26     }
27 }
```

Terminal output:

```
PS C:\Users\Prince> & 'C:\Program Files\Java\jdk-24\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\Prince\AppData\Local\Temp\vscode_sws_59fba\jdt_ws\jdt.ls-java-project\bin' 'code4'
Add: 15
Subtract: 5
Multiply: 50
Divide: 2
PS C:\Users\Prince>
```

Run and Debug panel shows the execution of 'code4'.