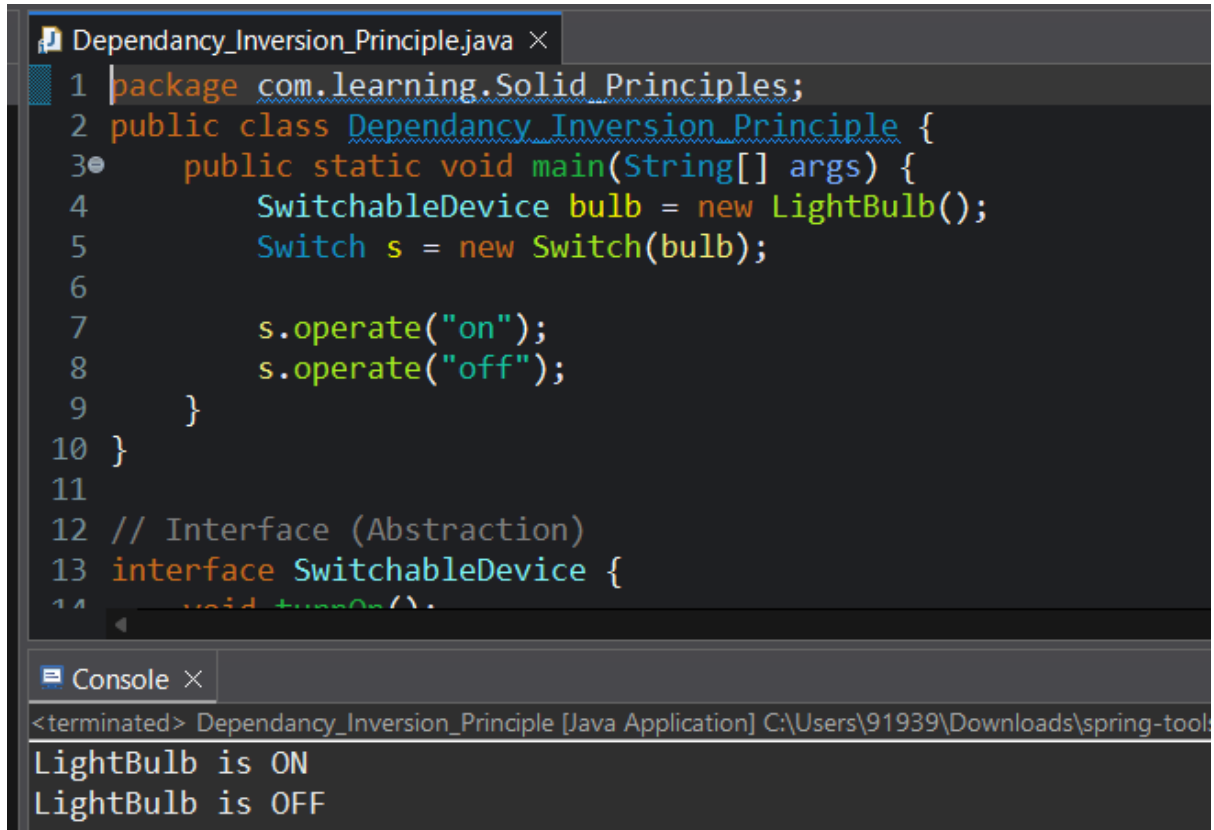


SOLID_PRINCIPLES_OUTPUTS

Dependency_Inversion_Principle :-

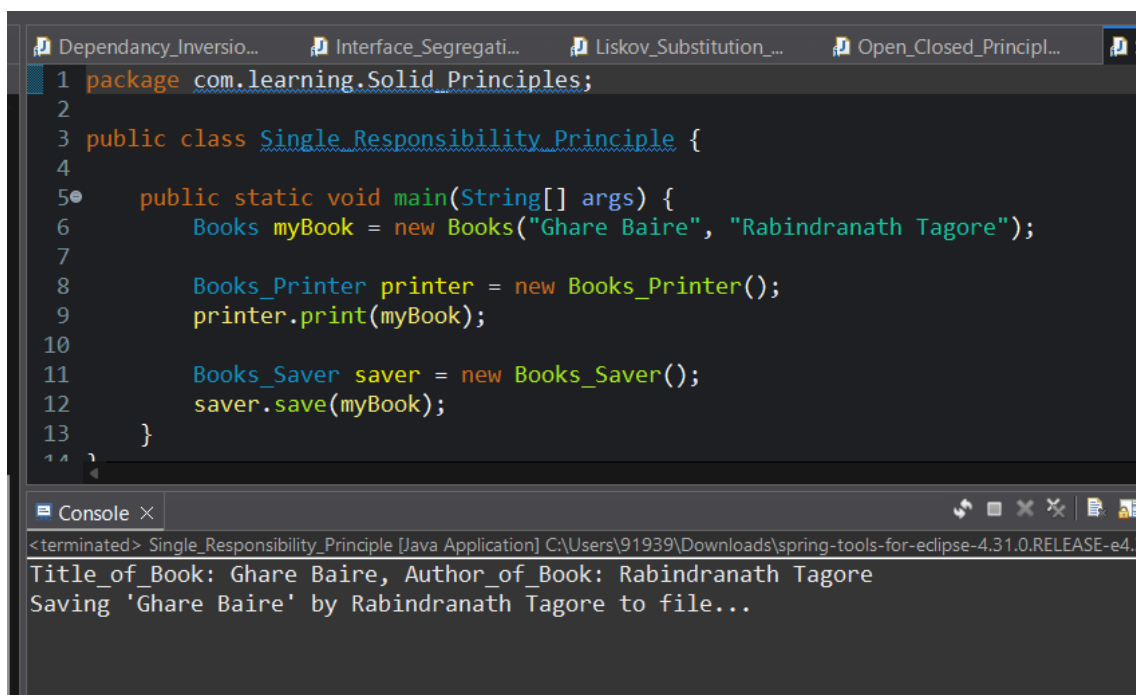


```
1 package com.learning.Solid_Principles;
2 public class Dependency_Inversion_Principle {
3     public static void main(String[] args) {
4         SwitchableDevice bulb = new LightBulb();
5         Switch s = new Switch(bulb);
6
7         s.operate("on");
8         s.operate("off");
9     }
10 }
11
12 // Interface (Abstraction)
13 interface SwitchableDevice {
14     void turnOn();
15 }
```

Console Output:

```
<terminated> Dependency_Inversion_Principle [Java Application] C:\Users\91939\Downloads\spring-tool
LightBulb is ON
LightBulb is OFF
```

Single_Responsibility_Principle :-

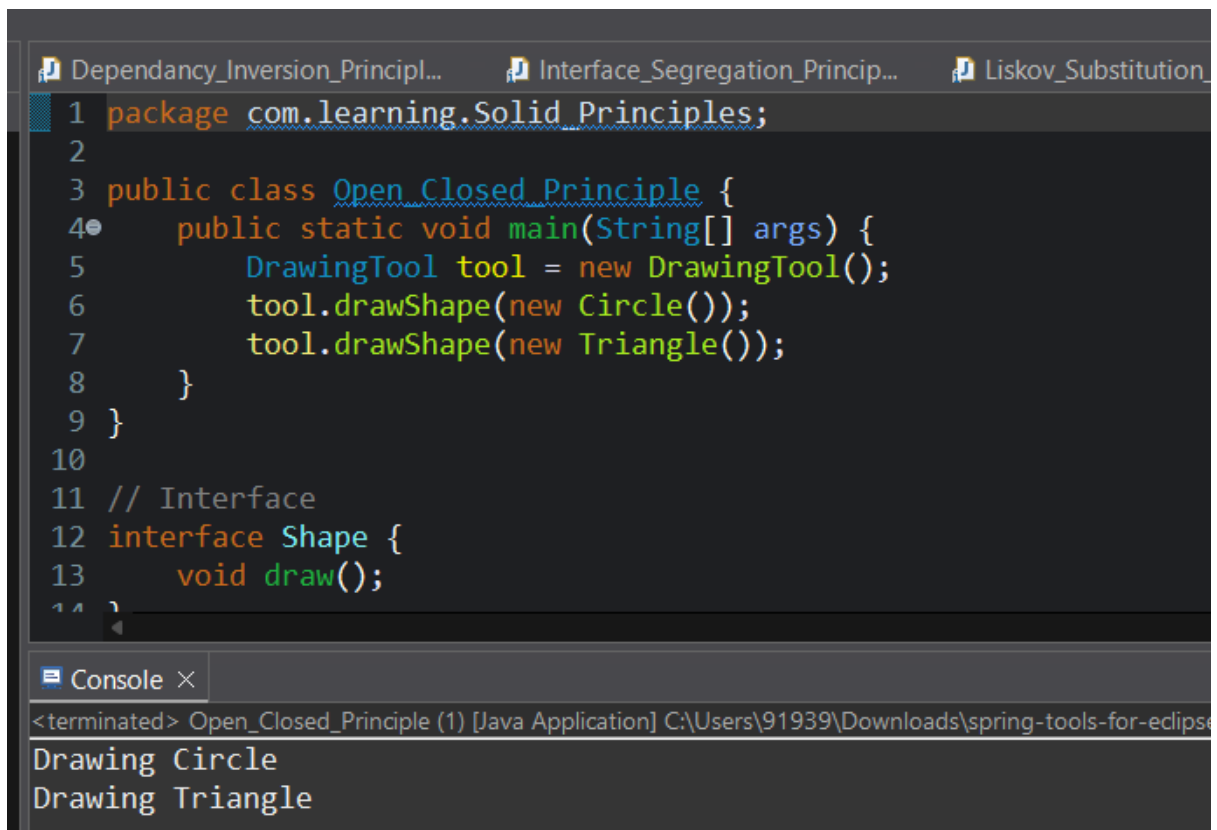


```
1 package com.learning.Solid_Principles;
2
3 public class Single_Responsibility_Principle {
4
5     public static void main(String[] args) {
6         Books myBook = new Books("Ghare Baire", "Rabindranath Tagore");
7
8         Books_Printer printer = new Books_Printer();
9         printer.print(myBook);
10
11         Books_Saver saver = new Books_Saver();
12         saver.save(myBook);
13     }
14 }
```

Console Output:

```
<terminated> Single_Responsibility_Principle [Java Application] C:\Users\91939\Downloads\spring-tools-for-eclipse-4.31.0.RELEASE-e4.
Title_of_Book: Ghare Baire, Author_of_Book: Rabindranath Tagore
Saving 'Ghare Baire' by Rabindranath Tagore to file...
```

Open_Closed_Principle :-



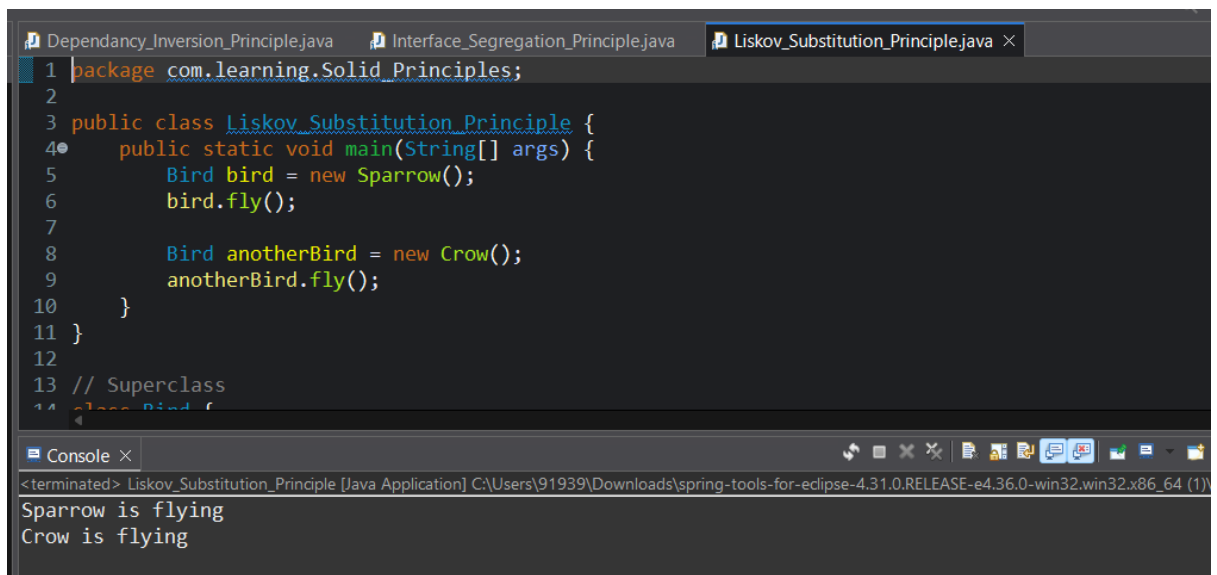
The screenshot shows the Eclipse IDE with three tabs: 'Dependency_Inversion_Principle...', 'Interface_Segregation_Principle...', and 'Liskov_Substitution_...'. The active tab is 'Open_Closed_Principle.java'. The code in the editor is as follows:

```
1 package com.learning.Solid_Principles;
2
3 public class Open_Closed_Principle {
4     public static void main(String[] args) {
5         DrawingTool tool = new DrawingTool();
6         tool.drawShape(new Circle());
7         tool.drawShape(new Triangle());
8     }
9 }
10
11 // Interface
12 interface Shape {
13     void draw();
14 }
```

The console output at the bottom shows the execution results:

```
<terminated> Open_Closed_Principle (1) [Java Application] C:\Users\91939\Downloads\spring-tools-for-eclipse
Drawing Circle
Drawing Triangle
```

Liskov_Substitution_Principle :-



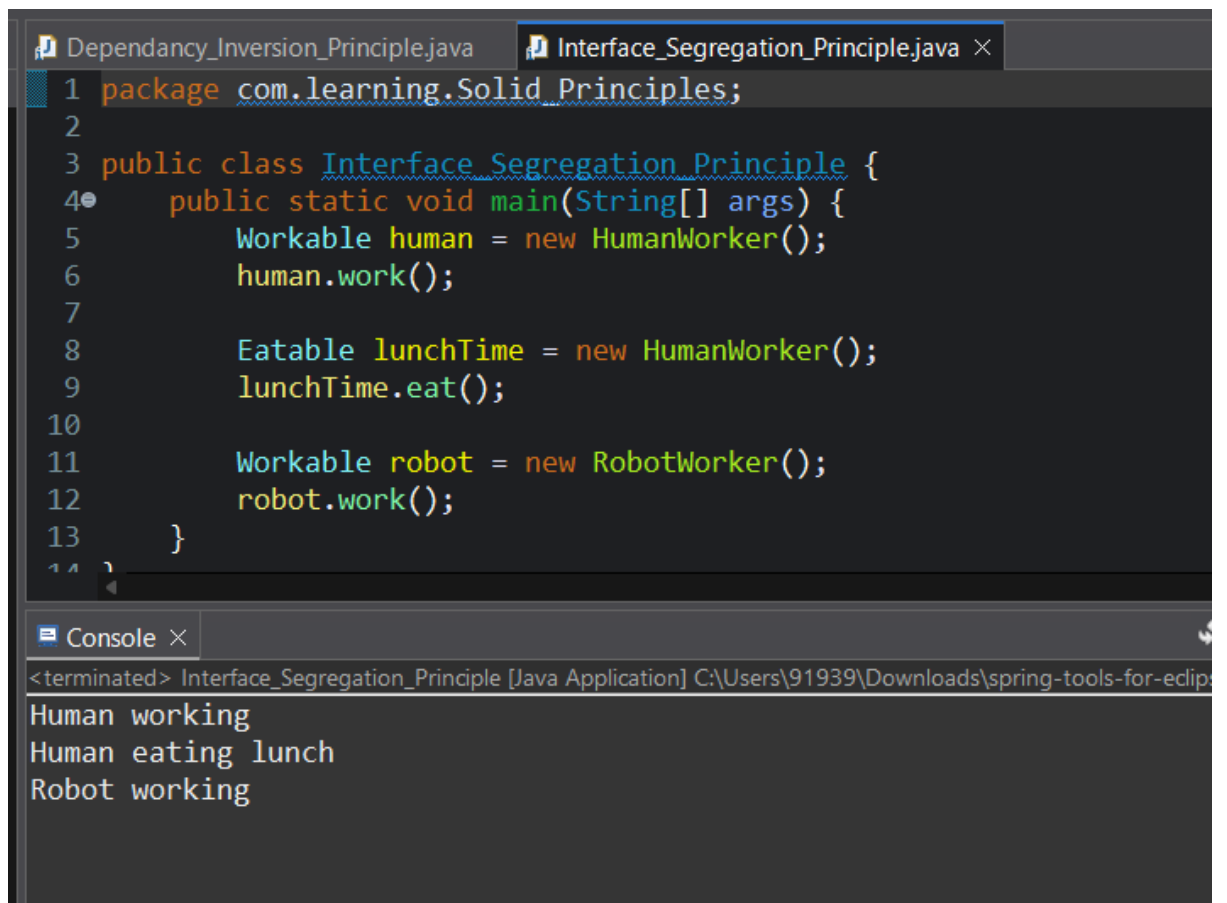
The screenshot shows the Eclipse IDE with three tabs: 'Dependency_Inversion_Principle.java', 'Interface_Segregation_Principle.java', and 'Liskov_Substitution_Principle.java'. The active tab is 'Liskov_Substitution_Principle.java'. The code in the editor is as follows:

```
1 package com.learning.Solid_Principles;
2
3 public class Liskov_Substitution_Principle {
4     public static void main(String[] args) {
5         Bird bird = new Sparrow();
6         bird.fly();
7
8         Bird anotherBird = new Crow();
9         anotherBird.fly();
10    }
11 }
12
13 // Superclass
14 class Bird {
```

The console output at the bottom shows the execution results:

```
<terminated> Liskov_Substitution_Principle [Java Application] C:\Users\91939\Downloads\spring-tools-for-eclipse-4.31.0.RELEASE-e4.36.0-win32.win32.x86_64 (1)
Sparrow is flying
Crow is flying
```

Interface_Segregation_Principle :-



```
Dependency_Inversion_Principle.java  Interface_Segregation_Principle.java ×
1 package com.learning.Solid_Principles;
2
3 public class Interface_Segregation_Principle {
4     public static void main(String[] args) {
5         Workable human = new HumanWorker();
6         human.work();
7
8         Eatable lunchTime = new HumanWorker();
9         lunchTime.eat();
10
11         Workable robot = new RobotWorker();
12         robot.work();
13     }
14 }

Console ×
<terminated> Interface_Segregation_Principle [Java Application] C:\Users\91939\Downloads\spring-tools-for-eclip
Human working
Human eating lunch
Robot working
```