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J DependencyInversionPrinciple.java 

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J DependencyInversionPrinciple.java > ∙ ∪ Light
       interface Light {
       void turnOn();
       class LEDLight implements Light {
           public void turnOn() {
               System.out.println(x:"LED Light is ON");
           Light light;
           Switch(Light light) {
               this.light = light;
           void operate() {
               light.turnOn();
                                   TERMINAL
                                                                                             Run: Dependency
PS C:\Users\Nikhila Kadaveru\eclipse-workspace\Assignments-Wipro\Solid Principles> & 'C:\Program Files\Ja
LED Light is ON
PS C:\Users\Nikhila Kadaveru\eclipse-workspace\Assignments-Wipro\Solid Principles>
```

Figure 1DependencyInversionPrinciple

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J InterfaceSegrigationPrinciple.java X
J InterfaceSegrigationPrinciple.java > ∙∙ Printer
      interface Printer {
       void print();
          void scan();
      class PrintMachine implements Printer {
          public void print() {
              System.out.println(x:"Printing document");
      class ScanMachine implements Scanner {
          public void scan() {
              System.out.println(x:"Scanning document");
      public class InterfaceSegrigationPrinciple {
          OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS
PS C:\Users\Nikhila Kadaveru\eclipse-workspace\Assignments-Wipro\Solid Principles> & 'C:\Program
ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\Nikhila Kadaveru\AppData\Roaming\Code\User\wor
bd13fadd\redhat.java\jdt_ws\Solid Principles_45684cf8\bin' 'InterfaceSegrigationPrinciple'
Printing document
Scanning document
PS C:\Users\Nikhila Kadaveru\eclipse-workspace\Assignments-Wipro\Solid Principles>
```

Figure 2InterfaceSegrigationPrinciple

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J LiskovSubstitutionPrinciple.java 

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J LiskovSubstitutionPrinciple.java > ધ Animal
       class Animal {
       public void makeSound() {
               System.out.println(x:"Animal makes sound");
       class Dog extends Animal {
           public void makeSound() {
               System.out.println(x:"Dog barks");
       class Cat extends Animal {
           public void makeSound() {
               System.out.println(x:"Cat meows");
       public class LiskovSubstitutionPrinciple {
           public static void main(String[] args) {
               Animal a1 = new Dog();
           OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\Nikhila Kadaveru\eclipse-workspace\Assignments-Wipro\Solid Principles> & 'C:\Program
ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\Nikhila Kadaveru\AppData\Roaming\Code\User\wor
bd13fadd\redhat.java\jdt ws\Solid Principles_45684cf8\bin' 'LiskovSubstitutionPrinciple'
Dog barks
Cat meows
PS C:\Users\Nikhila Kadaveru\eclipse-workspace\Assignments-Wipro\Solid Principles>
```

Figure 3LiskovSubstitutionPrinciple

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J OpenClosedPrinciple.java X
J OpenClosedPrinciple.java > ⁴ Message
      abstract class Message {
  1
         abstract String getMessage();
      class TextMessage extends Message {
           public String getMessage() {
               return "This is a text message.";
      class EmailMessage extends Message {
           public String getMessage() {
               return "This is an email message.";
      public class OpenClosedPrinciple {
           public static void main(String[] args) {
               Message text = new TextMessage();
               Message email = new EmailMessage();
PROBLEMS
          OUTPUT
                   DEBUG CONSOLE
                                  TERMINAL
                                            PORTS
PS C:\Users\Nikhila Kadaveru\eclipse-workspace\Assignments-Wipro\Solid Principles> & 'C:
ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\Nikhila Kadaveru\AppData\Roaming\Code
bd13fadd\redhat.java\jdt_ws\Solid Principles_45684cf8\bin' 'OpenClosedPrinciple'
This is a text message.
This is an email message.
PS C:\Users\Nikhila Kadaveru\eclipse-workspace\Assignments-Wipro\Solid Principles>
```

Figure 4OpenClosedPrinciple

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angienesponsibilityrnincipie.java 🗈 🖊
🤳 SingleResponsibilityPrinciple.java > ધ Student
      class Student {
         String name;
           Student(String name) {
               this.name = name;
           void displayInfo() {
               System.out.nrintln/"Student Name. " + name).
                            void java.io.PrintStream.println(String x)
                            Prints a String and then terminates the line. This method behaves as the
                             • Parameters:
      class StudentData {
                               • x The String to be printed.
          void save(Stude
               System.out.println("Saving student name: " + student.name);
      public class SingleResponsibilityPrinciple {
           public static void main(String[] args) {
               Student s = new Student(name: "Nikhila");
PROBLEMS
                                   TERMINAL
PS C:\Users\Nikhila Kadaveru\eclipse-workspace\Assignments-Wipro\Solid Principles> & '(
ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\Nikhila Kadaveru\AppData\Roaming\Cod
bd13fadd\redhat.java\jdt_ws\Solid Principles_45684cf8\bin' 'SingleResponsibilityPrincipl
Student Name: Nikhila
Saving student name: Nikhila
PS C:\Users\Nikhila Kadaveru\eclipse-workspace\Assignments-Wipro\Solid Principles>
```

Figure 5SingleResponsibilityPrinciple