**package** ProxyPatternExample;

**public** **interface** Image {

**void** display();

}

**package** ProxyPatternExample;

**public** **class** RealImage **implements** Image {

**private** String fileName;

**public** RealImage(String fileName) {

**this**.fileName = fileName;

loadFromDisk(fileName);

}

**private** **void** loadFromDisk(String fileName) {

System.***out***.println("Loading " + fileName);

}

**public** **void** display() {

System.***out***.println("Displaying " + fileName);

}

}

**package** ProxyPatternExample;

**public** **class** ProxyImage **implements** Image {

**private** RealImage realImage;

**private** String fileName;

**public** ProxyImage(String fileName) {

**this**.fileName = fileName;

}

**public** **void** display() {

**if** (realImage == **null**) {

realImage = **new** RealImage(fileName); // Load only when needed

}

realImage.display();

}

}

**package** ProxyPatternExample;

**public** **class** Main {

**public** **static** **void** main(String[] args) {

Image image1 = **new** ProxyImage("photo1.jpg");

image1.display();

System.***out***.println("---");

image1.display();

}

}

