// Product Interface

interface Document {

void open();

}

// Concrete Products

class WordDocument implements Document {

@Override

public void open() {

System.out.println("Opening Word document.");

}

}

class PdfDocument implements Document {

@Override

public void open() {

System.out.println("Opening PDF document.");

}

}

// Creator Abstract Class

abstract class DocumentCreator {

public abstract Document createDocument();

public void openDocument() {

Document doc = createDocument();

doc.open();

}

}

// Concrete Creators

class WordDocumentCreator extends DocumentCreator {

@Override

public Document createDocument() {

return new WordDocument();

}

}

class PdfDocumentCreator extends DocumentCreator {

@Override

public Document createDocument() {

return new PdfDocument();

}

}

// Client code

public class FactoryMethodPatternDemo {

public static void main(String[] args) {

DocumentCreator wordCreator = new WordDocumentCreator();

DocumentCreator pdfCreator = new PdfDocumentCreator();

wordCreator.openDocument(); // Output: Opening Word document.

pdfCreator.openDocument(); // Output: Opening PDF document.

}

}