**Implementing the Factory Method Pattern Superset ID: 6385612**

import java.util.\*;

// Interface

interface Document {

void open();

}

// Concrete Document Classes

class WordDocument implements Document {

public void open() {

System.out.println("Word document is opened");

}

}

class PdfDocument implements Document {

public void open() {

System.out.println("PDF document is opened");

}

}

class ExcelDocument implements Document {

public void open() {

System.out.println("Excel document is opened");

}

}

// Abstract Factory

abstract class DocumentFactory {

public abstract Document createDocument();

}

// Concrete Factories

class WordFactory extends DocumentFactory {

public Document createDocument() {

return new WordDocument();

}

}

class PdfFactory extends DocumentFactory {

public Document createDocument() {

return new PdfDocument();

}

}

class ExcelFactory extends DocumentFactory {

public Document createDocument() {

return new ExcelDocument();

}

}

// Main Class

public class Main {

public static void main(String[] args) {

DocumentFactory wordFactory = new WordFactory();

Document wordDoc = wordFactory.createDocument();

wordDoc.open();

DocumentFactory pdfFactory = new PdfFactory();

Document pdfDoc = pdfFactory.createDocument();

pdfDoc.open();

DocumentFactory excelFactory = new ExcelFactory();

Document excelDoc = excelFactory.createDocument();

excelDoc.open();

}

}

**OUTPUT:**

