**Exercise 2: Implementing the Factory Method Pattern**

**Scenario:**

You are developing a document management system that needs to create different types of documents (e.g., Word, PDF, Excel). Use the Factory Method Pattern to achieve this.

**CODE:**

public class FactoryMethodPatternExample {

    public static void main(String[] args) {

        DocumentFactory e = new pdfFactory();

        document d = e.createDocument();

        d.create();

    }

}

interface document{

    public void create();

}

class WordDocument implements document{

    @Override

    public void create() {

        System.out.println("word document is created");

    }

}

class PdfDocument implements document{

    @Override

    public void create() {

        System.out.println("Pdf document is created");

    }

}

class ExcelDocument implements document{

    @Override

    public void create() {

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

    }

}

abstract class DocumentFactory{

    public abstract document createDocument();

}

class wordFactory extends DocumentFactory{

    @Override

    public document createDocument() {

        return new WordDocument();

    }

}

class pdfFactory extends DocumentFactory{

    @Override

    public document createDocument() {

        return new PdfDocument();

    }

}

class excelFactory extends DocumentFactory{

    @Override

    public document createDocument() {

        return new ExcelDocument();

    }

}

**OUTPUT:**

