abstract class Document {

    protected String content;

    public Document(String content) {

        this.content = content;

    }

    abstract void open();

    abstract void save();

}

class WordDocument extends Document {

    public WordDocument(String content) {

        super(content);

    }

    @Override

    void open() {

        System.out.println("Opening Word Document with content: " + content);

    }

    @Override

    void save() {

        System.out.println("Saving Word Document with content: " + content);

    }

}

class PdfDocument extends Document {

    public PdfDocument(String content) {

        super(content);

    }

    @Override

    void open() {

        System.out.println("Opening PDF Document with content: " + content);

    }

    @Override

    void save() {

        System.out.println("Saving PDF Document with content: " + content);

    }

}

class ExcelDocument extends Document {

    public ExcelDocument(String content) {

        super(content);

    }

    @Override

    void open() {

        System.out.println("Opening Excel Document with content: " + content);

    }

    @Override

    void save() {

        System.out.println("Saving Excel Document with content: " + content);

    }

}

abstract class DocumentFactory {

    abstract Document createDocument(String content);

}

class WordDocumentFactory extends DocumentFactory {

    @Override

    Document createDocument(String content) {

        return new WordDocument(content);

    }

}

class PdfDocumentFactory extends DocumentFactory {

    @Override

    Document createDocument(String content) {

        return new PdfDocument(content);

    }

}

class ExcelDocumentFactory extends DocumentFactory {

    @Override

    Document createDocument(String content) {

        return new ExcelDocument(content);

    }

}

public class FactoryMethodTest {   public static void main(String[] args) {

        DocumentFactory wordFactory = new WordDocumentFactory();

        DocumentFactory pdfFactory = new PdfDocumentFactory();

        DocumentFactory excelFactory = new ExcelDocumentFactory();

        Document wordDoc = wordFactory.createDocument("Word Content");

        Document pdfDoc = pdfFactory.createDocument("PDF Content");

        Document excelDoc = excelFactory.createDocument("Excel Content");

        wordDoc.open();

        wordDoc.save();

        pdfDoc.open();

        pdfDoc.save();

        excelDoc.open();

        excelDoc.save();

    }

}

OUTPUT:

A black screen with white text

AI-generated content may be incorrect.