**Implementing the Factory Method Pattern**

interface Document{

}

class WordDocument implements Document{

    WordDocument()

    {

        System.out.println("Word Document created");

    }

}

class PdfDocument implements Document{

    PdfDocument()

    {

        System.out.println("PDF Document created");

    }

}

class ExcelDocument implements Document{

    ExcelDocument()

    {

        System.out.println("Excel Document created");

    }

}

interface DocumentFactory{

    Document createDocument();

}

class WordDocumentFactory implements DocumentFactory{

    public Document createDocument()

    {

        return new WordDocument();

    }

}

class PdfDocumentFactory implements DocumentFactory{

    public Document createDocument()

    {

        return new PdfDocument();

    }

}

class ExcelDocumentFactory implements DocumentFactory{

    public Document createDocument()

    {

        return new ExcelDocument();

    }

}

public class service {

    static Document createDocument(String path){

        DocumentFactory df;

        if(path.endsWith(".pdf")){

            df=new PdfDocumentFactory();

        }

        else if(path.endsWith(".docx")){

            df=new WordDocumentFactory();

        }

        else

        {

            df=new ExcelDocumentFactory();

        }

        return df.createDocument();

    }

}

public class test {

    public static void main(String[] args) {

        service.createDocument("user\\xyz\\exercise.docx");

        service.createDocument("user\\xyz\\result.pdf");

        service.createDocument("user\\xyz\\shortlisted.xlsx");

    }

}

**Output:**