Exercise 2: Implementing the Factory Method Pattern

public class FactoryMethod {

    interface Document {

        void docType();

    }

    static class WordDocument implements Document {

        public void docType() {

            System.out.println("WordDocument is created");

        }

    }

    static class PdfDocument implements Document {

        public void docType() {

            System.out.println("PdfDocument is created");

        }

    }

    static class ExcelDocument implements Document {

        public void docType() {

            System.out.println("ExcelDocument is created");

        }

    }

    static abstract class documentFactory {

        public abstract Document CreateDocument();

    }

    static class WordDocumentFactory extends documentFactory {

        public Document CreateDocument() {

            return new WordDocument();

        }

    }

    static class PdfDocumentFactory extends documentFactory {

        public Document CreateDocument(){

            return new PdfDocument();

        }

    }

    static class ExcelDocumentFactory extends documentFactory {

        public Document CreateDocument(){

            return new ExcelDocument();

        }

    }

    public static void main(String[] args) {

        documentFactory wordFactory = new WordDocumentFactory();

        Document word = wordFactory.CreateDocument();

        word.docType();

        documentFactory pdfFactory = new PdfDocumentFactory();

        Document pdf = pdfFactory.CreateDocument();

        pdf.docType();

        documentFactory excelFactory = new ExcelDocumentFactory();

        Document excel = excelFactory.CreateDocument();

        excel.docType();

    }

}

Output :

