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

**Program:**

public interface Documents {  
 public void print();  
}  
  
class ExcelDocument implements Documents{  
 public void print(){  
 System.*out*.println("Excel printing");  
 }  
}  
  
class WordDocument implements Documents{  
 public void print(){  
 System.*out*.println("Word printing\n");  
 }  
}  
  
class PdfDocument implements Documents {  
 public void print(){  
 System.*out*.println("pdf printing\n");  
 }  
}

public abstract class DocumentFactory {  
 public abstract Documents createDocument();  
}  
  
class PdfFactory extends DocumentFactory{  
 @java.lang.Override  
 public Documents createDocument() {  
 return new PdfDocument();  
 }  
}  
  
class ExcelFactory extends DocumentFactory{  
 @java.lang.Override  
 public Documents createDocument() {  
 return new ExcelDocument();  
 }  
}  
  
class WordFactory extends DocumentFactory{  
 @java.lang.Override  
 public Documents createDocument() {  
 return new WordDocument();  
 }  
}

public class Main {  
 public static void main(String[] args) {  
  
 DocumentFactory pdffac = new PdfFactory();  
 Documents pdfdoc = pdffac.createDocument();  
 pdfdoc.print();  
  
 DocumentFactory wordfac = new WordFactory();  
 Documents worddoc = wordfac.createDocument();  
 worddoc.print();  
  
 DocumentFactory excelfac = new ExcelFactory();  
 Documents exceldoc = excelfac.createDocument();  
 exceldoc.print();  
 }  
}

**Output:**

