**WEEK 1   
  
 DESIGN PATTERNS AND PRINCIPLES  
  
 EXERCISE 2 - IMPLEMENTING THE FACTORY   
 METHOD PATTERN**  
  
  
**STEP 1 - Document.cs :**

namespace FactoryMethodPatternExample.Documentsy

{

    public abstract class Document

    {

        public abstract void Open();

    }

}

**STEP 2 - ExcelDocument.cs :**

namespace FactoryMethodPatternExample.Documentsy

{

    public class ExcelDocument : Document

    {

        public override void Open()

        {

            Console.WriteLine("Opening Excel Document.");

        }

    }

}

**STEP 3 - PdfDocument.cs :**

namespace FactoryMethodPatternExample.Documentsy

{

    public class PdfDocument : Document

    {

        public override void Open()

        {

            Console.WriteLine("Opening PDF Document.");

        }

    }

}

**STEP 4 - WordDocument.cs :**

namespace FactoryMethodPatternExample.Documentsy

{

    public class ExcelDocument : Document

    {

        public override void Open()

        {

            Console.WriteLine("Opening Excel Document.");

        }

    }

}

**STEP 5 - DocumentFactory.cs :**

using FactoryMethodPatternExample.Documentsy;

namespace FactoryMethodPatternExample.Factories

{

    public abstract class DocumentFactory

    {

        public abstract Document CreateDocument();

    }

}

**STEP 6 - ExcelFactory.cs :**

using FactoryMethodPatternExample.Documentsy;

namespace FactoryMethodPatternExample.Factories

{

    public class ExcelFactory : DocumentFactory

    {

        public override Document CreateDocument()

        {

            return new ExcelDocument();

        }

    }

}

**STEP 7 - PdfFactory.cs :**

using FactoryMethodPatternExample.Documentsy;

namespace FactoryMethodPatternExample.Factories

{

    public class PdfFactory : DocumentFactory

    {

        public override Document CreateDocument()

        {

            return new PdfDocument();

        }

    }

}

**STEP 8 - WordFactory.cs :**

using FactoryMethodPatternExample.Documentsy;

namespace FactoryMethodPatternExample.Factories

{

    public class WordFactory : DocumentFactory

    {

        public override Document CreateDocument()

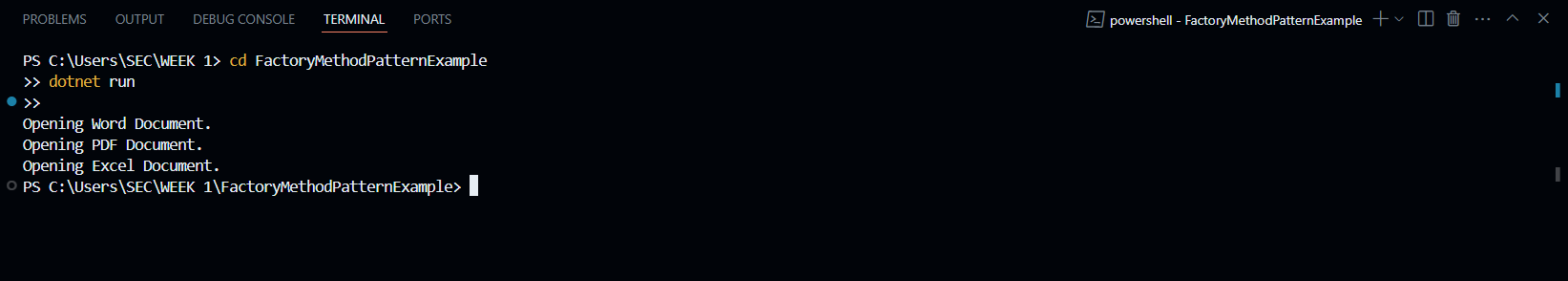
        {

            return new WordDocument();

        }

    }

}

**OUTPUT :   
  
  
**