**Exercise – 2 (Factory)  
Ashutosh Dash  
SUPERSET ID - 6365404**

using System;

interface IDocument

{

void Open();

}

class WordDocument : IDocument

{

public void Open()

{

Console.WriteLine("Word Document opened.");

}

}

class PdfDocument : IDocument

{

public void Open()

{

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

}

}

class ExcelDocument : IDocument

{

public void Open()

{

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

}

}

abstract class DocumentFactory

{

public abstract IDocument CreateDocument();

}

class WordFactory : DocumentFactory

{

public override IDocument CreateDocument()

{

return new WordDocument();

}

}

class PdfFactory : DocumentFactory

{

public override IDocument CreateDocument()

{

return new PdfDocument();

}

}

class ExcelFactory : DocumentFactory

{

public override IDocument CreateDocument()

{

return new ExcelDocument();

}

}

class Program

{

static void Main(string[] args)

{

DocumentFactory wordFactory = new WordFactory();

IDocument word = wordFactory.CreateDocument();

word.Open();

DocumentFactory pdfFactory = new PdfFactory();

IDocument pdf = pdfFactory.CreateDocument();

pdf.Open();

DocumentFactory excelFactory = new ExcelFactory();

IDocument excel = excelFactory.CreateDocument();

excel.Open();

Console.WriteLine("Factory Method Pattern implemented by Ashutosh Dash");

}

}

