## Theory Answers & Outputs

## **Design principles & Patterns**

## **Exercise 2: Factory Method Pattern**

The Factory Method Pattern defines an interface for creating an object but lets subclasses decide which class to instantiate. It promotes loose coupling and enhances flexibility in code. Each document type like Word, PDF, and Excel has its own factory to generate the respective object, reducing dependency on specific classes.

## **OUTPUT**

```
PS C:\Users\KIIT\Downloads\CSharp_DesignPatterns_Exercises (1)\6364375_week1\FactoryMethodPattern> dotnet run

>>>
Opening Word document.
Opening PDF document.
Opening Excel document.

$\frac{\phi}{\phi}$ PS C:\Users\KIIT\Downloads\CSharp_DesignPatterns_Exercises (1)\6364375_week1\FactoryMethodPattern>
```