**Introduction to design patterns in c#**

1. Write the object factory class named MessageFactory, which will allow you to create objects of the following classes:

SMS, Email,

Each class should have a send method and a Message field.

The SMS class should have a PhoneNumber field, while the Email class should have an email\_address field

1. Create a MessageList class that will store the SMS class objects and Email. Ensure that there is only one instance of the MessageList class.
2. Write a simple console application that allows you to add and display messages using the above elements.
3. Singleton example in c#

<https://msdn.microsoft.com/en-us/library/ff650316.aspx>

1. Factory example

<https://www.codeproject.com/Tips/737117/Factory-Pattern-Example-in-Csharp>

<https://www.dotnetperls.com/factory>

1. Object pool example

<https://www.c-sharpcorner.com/article/object-pooling-in-net/>