**EXERCISE 1 :Implementing the singleton pattern**

**Program**

using System;

class GameScore

{

    public static readonly GameScore ScoreManager = new GameScore();

        private int highScore;

    private GameScore()

    {

        Console.WriteLine("Score Manager Ready!");

        highScore = 0;

    }

    public void UpdateScore(int score)

    {

        if (score > highScore)

        {

            highScore = score;

            Console.WriteLine("New High Score: " + highScore);

        }

        else

        {

            Console.WriteLine("Score " + score + " is less than current high score.");

        }

    }

    public void ShowHighScore()

    {

        Console.WriteLine("Current High Score: " + highScore);

    }

}

class Program

{

    static void Main(string[] args)

    {

        GameScore player1 = GameScore.ScoreManager;

        player1.UpdateScore(50);

        GameScore player2 = GameScore.ScoreManager;

        player2.UpdateScore(40);

        GameScore player3 = GameScore.ScoreManager;

        player3.UpdateScore(70);

        GameScore.ScoreManager.ShowHighScore();

        if (player1 == player2 && player2 == player3)

        {

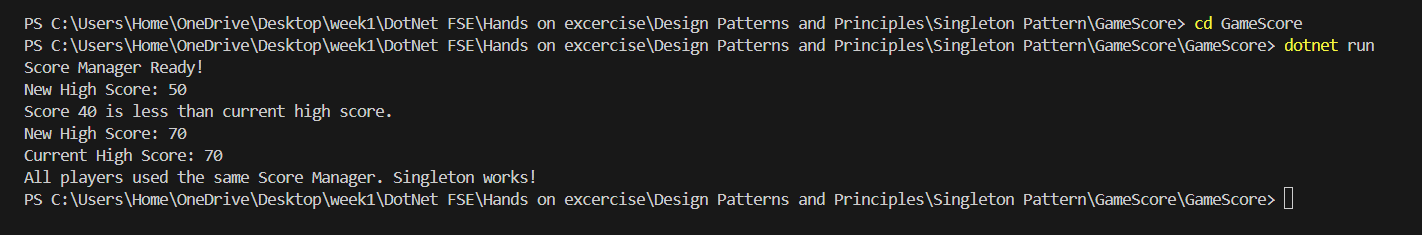
            Console.WriteLine("All players used the same Score Manager. Singleton works!");

        }

    }

}

**Output:**

****