using System;

// Define the Employee class

public class Employee

{

// Properties of the Employee class

public int Id { get; set; }

public string FirstName { get; set; }

public string LastName { get; set; }

// Overloading the '==' operator to compare Employee objects by Id

public static bool operator ==(Employee emp1, Employee emp2)

{

// Check if both objects are null

if (ReferenceEquals(emp1, null) && ReferenceEquals(emp2, null))

return true;

// Check if either object is null

if (ReferenceEquals(emp1, null) || ReferenceEquals(emp2, null))

return false;

// Compare the Id property

return emp1.Id == emp2.Id;

}

// Overloading the '!=' operator (must be overloaded in pairs with '==')

public static bool operator !=(Employee emp1, Employee emp2)

{

return !(emp1 == emp2);

}

}

// Program class with Main method

class Program

{

static void Main(string[] args)

{

// Creating two Employee objects

Employee emp1 = new Employee { Id = 1, FirstName = "Mike", LastName = "Tyson" };

Employee emp2 = new Employee { Id = 1, FirstName = "Steve", LastName = "Jobs" };

Employee emp3 = new Employee { Id = 2, FirstName = "Bill", LastName = "Gates" };

// Comparing two employees with the same Id

Console.WriteLine("Comparing emp1 and emp2: " + (emp1 == emp2)); // Expected: True

// Comparing employees with different Ids

Console.WriteLine("Comparing emp1 and emp3: " + (emp1 == emp3)); // Expected: False

// Keeping console open

Console.ReadLine();

}

}