**Part 45 - C# Tutorial - Why Enums**

**Enums are strongly typed constants**. Let's understand enums with an example. I have a customer class with Name and Gender properties. Gender is an integer.   
**0 is an Unknown gender**  
**1 is Male**  
**2 is Female**  
  
  
This program is less readable and maintainable, as it operates on integrals instead of using **enums**.  
  
  
In the next session we will replace, these integral numbers with enums, which makes the program better readable and maintainable.

using System;  
public class Enums  
{  
    public static void Main()  
    {  
        Customer[] customers = new Customer[3];  
        customers[0] = new Customer()  
        {  
            Name = "Mark",  
            Gender = 1  
        };  
        customers[1] = new Customer()  
        {  
            Name = "Mary",  
            Gender = 2  
        };  
        customers[2] = new Customer()  
        {  
            Name = "Sam",  
            Gender = 0  
        };  
        foreach (Customer customer in customers)  
        {  
            Console.WriteLine("Name = {0} && Gender = {1}", customer.Name, GetGender(customer.Gender));  
        }  
    }  
  
  
    public static string GetGender(int gender)  
    {  
        // The swicth here is less readable because of these integral numbers  
        switch (gender)  
        {  
            case 0:  
                return "Unknown";  
            case 1:  
                return "Male";  
            case 2:  
                return "Female";  
            default:  
                return "Invalid Data for Gender";  
        }  
    }  
}  
  
  
// 0 - Unknown  
// 1 - Male  
// 2 - Female  
  
  
public class Customer  
{  
    public string Name { get; set; }  
    public int Gender { get; set; }  
}  
[Please click here, to watch the video on rewriting the above example using enum, which makes the program more readable and mainatainable](http://csharp-video-tutorials.blogspot.com/2012/06/part-46-c-tutorial-enums-example.html)