**Enum**

**Is also a user defined type , it’s a value type variable**

An enumeration is a set of named integer constants. An enumerated type is declared using the **enum** keyword.

represents a group of **constants**

When to use enums : Whenever we have some limited options

Like Days Sunday , Monday ----------------- Saturday

1 – Sunday

2- Monday

Gender > Male Female Others

Colors : red Green yellow

Choice Add Subtract Multiple Divide

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ClassDemo

{

enum Days {Sunday=2 , Monday , Tuesday , Wednesday

, Thursday=0, Friday, Satudray};

class EnumDemo

{

static void Main()

{

Console.WriteLine((int)Days.Friday);

Console.WriteLine((int) Days.Monday);

}

}

}

**Without Using Enum**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ClassDemo

{

class EnumDemo

{

static void Main()

{

int x, y;

Console.WriteLine("Enter No1");

x = int.Parse(Console.ReadLine());

Console.WriteLine("Enter No2");

y = int.Parse(Console.ReadLine());

Console.WriteLine("Enter Choice");

int ch = byte.Parse(Console.ReadLine());

switch(ch)

{

case 1:

{

Console.WriteLine(x+y);

break;

}

case 2:

{

Console.WriteLine(x - y);

break;

}

case 3:

{

Console.WriteLine(x \* y);

break;

}

case 4:

{

Console.WriteLine(x / y);

break;

}

default:

{

Console.WriteLine("Invalid Choice");

break;

}

}

}

}

}

**Enums make program easy to understand for DEVELOPERS NOT END USERS**

**Using Enum**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ClassDemo

{

enum Days {Sunday=2 , Monday , Tuesday , Wednesday

, Thursday=0, Friday, Satudray};

enum Choice { Addition=1 , Subtraction,

Multiply, Divide };

class EnumDemo

{

static void Main()

{

int x, y;

Console.WriteLine("Enter No1");

x = int.Parse(Console.ReadLine());

Console.WriteLine("Enter No2");

y = int.Parse(Console.ReadLine());

Console.WriteLine("Enter Choice");

int ch = byte.Parse(Console.ReadLine());

switch(ch)

{

case (int)Choice.Addition:

{

Console.WriteLine(x+y);

break;

}

case (int)Choice.Subtraction:

{

Console.WriteLine(x - y);

break;

}

case (int)Choice.Multiply:

{

Console.WriteLine(x \* y);

break;

}

case (int)Choice.Divide:

{

Console.WriteLine(x / y);

break;

}

default:

{

Console.WriteLine("Invalid Choice");

break;

}

}

Console.WriteLine((int)Days.Friday);

Console.WriteLine((int) Days.Monday);

}

}

}

Structure

Is a user defined

