

F# - ENUMERATIONS

http://www.tutorialspoint.com/fsharp/fsharp_enumerations.htm

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An enumeration is a set of named integer constants.

In F#, **enumerations**, also known as **enums**, are integral types where labels are assigned to a subset of the values. You can use them in place of literals to make code more readable and maintainable.

Declaring Enumerations

The general syntax for declaring an enumeration is –

```
type enum-name =  
    | value1 = integer-literal1  
    | value2 = integer-literal2  
    ...
```

The following example demonstrates the use of enumerations –

Example

```
// Declaration of an enumeration.  
type Days =  
    | Sun = 0  
    | Mon = 1  
    | Tues = 2  
    | Wed = 3  
    | Thurs = 4  
    | Fri = 5  
    | Sat = 6  
  
// Use of an enumeration.  
let weekend1 : Days = Days.Sat  
let weekend2 : Days = Days.Sun  
let weekDay1 : Days = Days.Mon  
  
printfn "Monday: %A" weekDay1  
printfn "Saturday: %A" weekend1  
printfn "Sunday: %A" weekend2
```

When you compile and execute the program, it yields the following output –

```
Monday: Mon  
Saturday: Sat  
Sunday: Sun
```