

- Enum concept introduced in 1.5 versions.
- When compared with old languages, enum java's enum is more powerful.
- By using enum we can define our own data types which also come with enumerated data types.

Internal implementation of enum:

```
enum Color
{
    RED,BLUE,GREEN;
}
public final class Color extends java.lang.Enum
{
    public static final Color RED=new Color();
    public static final Color BLUE=new Color();
}
```

- Internally enum's are implemented by using class concepts.
- Every enum constant is a reference variable to that enum type object.
- Every enum constant is implicitly a public static final always.

Declaration and usage of enum:

#### Example 4:

```
enum Color
{
    RED,BLUE,GREEN;//here semicolon is optional.
}

class Test
{
    public static void main(String args[]){
        Color c=Color.RED;
        System.out.println(c);
    }
}
```

#### Output:

```
D:\Enum>java Test
RED
```

#### Note:

- Every enum constant is internally static hence we can access it by using "enum name".
- Internally inside every enum toString() method is implemented to return name of the constant

### • What is Annotation?

Java Annotation is a tag that represents the metadata i.e. attached with class, interface, methods or fields to indicate some additional information which can be used by java compiler and JVM.

Annotations in Java are used to provide additional information, so it is an alternative option for XML and Java marker interfaces.