

6.6 Enumeration as a Class

- Consider defining an enumeration for suits of cards

```
enum Suit {CLUBS, DIAMONDS, HEARTS, SPADES}
```

- Compiler creates  with methods

» **equals**

» **compareTo**

» **ordinal**

» **toString**

» **valueOf**

```

/** An enumeration of card suits. */
public class EnumTest
{
    enum SSuit {CLUBS, DIAMONDS, HEARTS, SPADES}
    public static void main(String[] args)
    {
        SSuit s = SSuit.DIAMONDS;
        System.out.println("s.ordinal()="+s.ordinal());

        System.out.println("s.compareTo(SSuit.HEARTS)="+s.compareTo(
SSuit.HEARTS));
        System.out.println("s.toString()="+s.toString());
    }
}

```

DIAMOND < Heart

```

C:\WINDOWS\system32\cmd.exe
s.ordinal()= [redacted]
s.compareTo(Suit.HEARTS)= [redacted]
s.toString()= DIAMOND
계속하려면 아무 키나 누르십시오

```

- EnumTest\$SSuit.class
- EnumTest.class
- EnumTest



Enumeration as a Class

- View enhanced enumeration, listing 6.20
`enum Suit`
- Note
 - » Instance variables
 - » Additional methods
 - » Constructor

// Listing 6.20

```
/** An enumeration of card suits. */
enum Suit
{
    CLUBS ("black"), DIAMONDS ("red"), HEARTS ("red"),
    SPADES ("black");

    private final String color;

    private Suit (String suitColor)
    {
        color = suitColor;
    }

    public String getColor ()
    {
        return color;
    }
}
```



```

/** An enumeration of card suits. */
public class EnumTest02
{
    public static void main(String[] args)
    {
        Suit s = Suit.DIAMONDS;
        System.out.println("s.ordinal()="+s.ordinal());

        System.out.println("s.compareTo(Suit.HEARTS)="+s.compareTo(S
uit.HEARTS));
        System.out.println("s.toString()="+s.toString());
        System.out.println("s.getColor() = "+s.getColor());
    }
}

```



The screenshot shows a Windows command prompt window with the title bar "C:\WINDOWS\system32\cmd.exe". The command prompt displays the output of the Java program:

s.ordinal()=1

s.compareTo(Suit.HEARTS)=-1

s.toString()=DIAMONDS

s.getColor() = red

Below the output, there is a line of Korean text: "계속하려면 아무 키나 누르십시오 . . ." (Press any key to continue).



עב
ע