#### **Enumeration**

Here we define an enumerated data type that contains seven instances, one for each day of the week.

```
enum class DayOfWeek(val fullName: String) {
    SUN("Sunday"),
    MON("Monday"),
    TUE("Tuesday"),
    WED("Wednesday"),
    THU("Thursday"),
    FRI("Friday"),
    SAT("Saturday");
}
```

A simpler version.

```
enum class Day {
    MON, TUE, WED, THU, FRI, SAT, SUN
}
```

## **Properties and Methods**

enums can have properties and methods.

```
fun isWeekDay(): Boolean = this in MON..FRI
println("Is ${d.fullName} a weekday? " + d.isWeekDay() )
```

### this Reference

this references the receiving object.

#### enums and when clauses

enums work well with when clauses:

Enumeration

```
fun isWeekend(): Boolean =
   when (this) {
       SAT, SUN -> true
       else     -> false
   }
```

# Picking a random entry

Pick a day of the week at random:

```
val d: DayOfWeek = DayOfWeek.entries.random()
```