

Equality

Structural Equality (== Operator)

When you run `a == b`, this is converted to:

```
if (a == null) {  
    return (b == null)  
} else {  
    return a.equals(b)  
}
```

Writing `.equals()` explicitly

```
class Distance(private val km: Int, private val metres: Int) {  
    override fun equals(other: Any?): Boolean =  
        (other is Distance) &&  
            (totalDistance() == other.totalDistance())  
    private fun totalDistance(): Int = km * 1000 + metres  
}
```

Writing `.equals()` implicitly

Use a `data class`

Referential Equality (=== Operator)

When you run `a === b`, the program will check whether `a` and `b` refer to the same object.