EXERCISE

Introduction

Object class is the super class of any class. Even the classes that do not explicitly *extends* Object class extends this class.

Because all of the object instances have some common features:

1. Logical comparison to other instances with the same type : equals() method

2. Summarizing the data inside as a string : toString() method

3. Summarizing the data inside according to a customized algorithm : hashCode() method

Objectives

- Override equals method to logically compare two instances of a class

Activities

We are working for a health insurance company project. The requirement is that: Validity date of an insurance policy can be defined in months, days or weeks.

Assuming that

1 month = 4 weeks = 7 days

We need to create a class called as MyTime and represent the times with different units.

When we compare two *MyTime* instances with equals() method, if the values are equivalent, result should be true.

- Create the class *MyTime*.

- Create a enum class named *TimeUnit* to represent time units. Its options should be DAY, WEEK and MONTH.

- Put two attributes inside MyTime:

  int amount, TimeUnit unit

- Put required constructors of MyTime.

- Override equals() method to satisfy below results:

```java
MyTime time1 = new MyTime(14, TimeUnit.DAY)

MyTime time2 = new MyTime(2, TimeUnit.WEEK)

MyTime time3 = new MyTime(8, TimeUnit.WEEK)

MyTime time4 = new MyTime(2, TimeUnit.MONTH)


System.out.println(time1.equals(time2))  // should be true

System.out.println(time3.equals(time4))  // should be true

System.out.println(time1.equals(time4))  // should be false
```