# **Exercise 2: Expired or Not?**

In this exercise, you have to compare the expiry dates of two products and, based on that, suggest which brand's product should be bought.

#### WE'LL COVER THE FOLLOWING

- Problem Statement
- Task 1
- Task 2
  - How to Calculate Current Date?
    - Calling Date as a Constructor
- Sample
- Sample Input
- Sample Output

## Problem Statement #

In this exercise, you are given a class **Product**. You need to implement the following tasks:

### Task 1#

Define the **constructor** which takes and initializes the following properties:

- name: the name of the product.
- price the price of the product.
- amount: the amount of product available in inventory.
- madeIn: the country in which the product is made in.
- expiryDate: the expiry date of the product.

brand: the name of the brand that made the product.

### Task 2 #

Define a static function checkExpiry(product1,product2). Here's what it should do:

- It should take two product objects of the same type but from different brands as parameters.
- It should compare their **expiryDate** with the current date.
- Based on the difference of the <a href="expiryDate">expiryDate</a> from the current date it should return which brand's product to buy, i.e., return the <a href="brand">brand</a> property of that product.
  - It should return Neither if both products have expired.
  - It should return brand property of product1 if product2 has expired,
     but product1 hasn't.
  - It should return brand property of product2 if product1 has expired,
     but product2 hasn't.
  - If neither of the products has expired it should compute the difference of both of their expiry dates from the current date and return the brand of the product whose difference is greater.
  - It should return **Either** if both products have the same expiry date.

#### How to Calculate Current Date? #

In JavaScript, Date can be used to create an instance that represents the current moment in time. When called as a *constructor*, it returns a Date object for the current date and time.

### Calling Date as a Constructor #

Let's take a look at how to call **Date** as a constructor:





ני

The currentDate variable will now store the present day date and time.

In order to read up more on Date and how it's used, click on the following link.

# Sample #

Consider that we have Cheese products with the following information:

- Product: Cheese
- Product 1 Brand: HappyCheese
- Product 2 Brand: CheeseyCheese

checkExpiry will take in product1 and product2 as parameters and will compare their expiry dates. However, to ease your understanding, the test case below shows the expiry dates of both the products as parameters.

# Sample Input #

```
checkExpiry(Sat Dec 25 2010, Fri Dec 25 2009)
checkExpiry(Tue Sep 22 2009, Sat Sep 22 2040)
checkExpiry(Tue Nov 10 2020, Tue Nov 10 2020)
checkExpiry(Mon Dec 02 2030, Tue Dec 02 2008)
```

# Sample Output #

```
Neither
CheeseyCheese
Either
HappyCheese
```

**Note:** The olution to this exercise is available in the code widget below. However, it'll be good practice to solve this problem yourself first. Good luck!

