Challenge 1: Finding Max in an Array

In this exercise you have to use template type to generalize the method used to find max element in an array.

We'll cover the following

Problem statement

In the code widget below, **two** methods both called `array_max` are declared. One finds **max** value for `int` type inputs and the other for `double` type.

In this exercise, you need to define a **Generic Class type** method called `array_max` that will generalize the method such that it finds **maximum** value for both `int` and `double` type array input values.

> **IMPORTANT NOTE:** Remove both the `int` and `double` type `array_max` methods and then write the code for the **Generic Class type** `array_max` method there.

Your generic class type `array_max` method code should find the **maximum** element in an array using generics.

- Method will take the *array* and *array size* as parameters.

Expected input

Input 1:

If input is:

```
int arr[] = {2,8,20,3,4};
```

Input 2:

If input is:

```
double arr[] = {2.7,3.8,5.5,6.7,9.7}
```

Expected output

Expected Output 1:

```
20
```

Expected Output 2:

```
9.7
```

Coding challenge

You have to write a function that uses the Generic Class type to write a single function that works for both `int` and `double` inputs. Remove the two functions below in the code widget and instead write a Generic class type `array_max` function that finds max value for either of the two types.

Write your code below. It is recommended that you try solving the exercise yourself before viewing the solution.

Good Luck!

```
class FindMax {
    public static Integer array_max(Integer data[], int n) {
        //body of code
        return 0;
    }

    public static Double array_max(Double data[], int n) {
        //body of code
        return 0.0;
    }
}
```

Hint 1 of 1

Think of reusing the solution for finding max out of 3 inputs in the previous lesson.

Let’s go over the solution review in the upcoming lesson.