

Exercise 1: Finding Max in an Array

This exercise requires you to use template type to generalize the function used to find max element in an array

We'll cover the following ^

- Problem Statement

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In the code widget below, **two** functions 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 **Template Class type** function called `array_max` that will generalize the function 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` functions and then write the code for the **Template Class type** `array_max` function there.

Your template class type `array_max` function code should find the **maximum** element in an array using

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

Down below is what the *expected output* should look like.

Input 1:

If input is:

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

Input 2:

If input is:

```
double arr[] = {2.8,20.3,20.4,15.5}
```

Expected Output 1:

```
20
```

Expected Output 2:

```
20.4
```

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

Good Luck!

```
#include <iostream>
#include <vector>
#include <string>
using namespace std;

//You need to write a function that uses Template Class type to
// write a single function that works for both int and double inputs
//remove the two functions below
//instead write a template class type array_max function that finds max value for either of the two

int array_max(int data[], int n){
    //body of code
}

double array_max(double data[], int n){
    //body of code
}
```

