Exercise 2: Swapping Values

This exercise requires you to use template type to generalize the function used to swap two values

We'll cover the following

- Problem Statement

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In the code widget below, **two** functions both called `swap_values` are declared. One finds **swaps** values for `int` type inputs and the other for `double` type.

In this exercise, you need to define a **Template Class type** function called `swap_values` that will generalize the function such that it finds **swaps** values for both `int` and `double` type input values.

> **IMPORTANT NOTE:** Remove both the `int` and `double` type `swap_values` functions and then write the code for the **Template Class type** `swap_values` function there.

Your template class type `swap_values` function code should swap two values.

- The function takes **two** values passed by reference and **swaps** them.

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

Your function will be tested on **Inputs**

```
int x1 = 2 , int y1 = 3, double x1 = 2.5 , double y2 = 3.5
```

Your function should swap the two `int` values and the two `double` values.

Here is what the output should look like in this case.

Expected Output:

The expected output will be displayed as a `string` with the swapped `int` values appended first and sorted `double` values appended after.

```
3 2 3.5 2.5
```

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

Good Luck!

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


void swap_values(int& v1, int& v2){
  //body of code
}

void swap_values(double& v1, double& v2){
 //body of code
}

//Code to test your code. You don't have to touch this part
string test(int v1, int v2, double v3, double v4){
  string str="";
  swap_values(v1,v2);
  swap_values(v3,v4);
  str = to_string(v1) + " " + to_string(v2) + " " + to_string(v3) + " " + to_string(v4);
  return str;
}
```