The objective of this lab is to:

Understand and practice Templates.

Instructions!

1. This is a **graded** lab, you are strictly **NOT** allowed to discuss your solutions with your fellow colleagues, even not allowed asking how is he/she is doing, it may result in negative marking. You can **ONLY** discuss with your TAs or with me.
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3. Follow good coding conventions.

Task 01: (Function Templates) [15 Marks]

1. Write a function template for the finding minimum of two values. The function should accept two arguments and return the value of the argument that is the lesser of the two. Design a simple driver program that demonstrates the templates with various data types.

2. Write a function template for the finding maximum. The maximum function should accept two arguments, an array and its size. It should them return the index of the largest values in the array. Call the function in a driver program for various data types.

3. Write a function template that accepts an argument and returns its absolute value. The absolute value of a number is its value with no sign. For example, the absolute value of 5 is 5, and the absolute value of 2 is 2. Test the template in a simple driver program. Call this function for int, float and double data types.

Task 02: (Class Templates) [20 Marks]

You have already implemented Set class as part of Assignment 01. Modify that Set class to make a template class. Then test template class with different data types in *main( )* function.