1. Modify the code from your HW2 as follows:

   Your `triangle` functions will now return a `string` object. This string will contain the identification of the triangle as one of the following (with a potential prefix of the word "Right "):

   Not a triangle
   Scalene triangle
   Isosceles triangle
   Equilateral triangle

2. All output to `cout` will be moved from the `triangle` functions to the `main` function.

3. The `triangle` functions are still responsible for rearranging the values such that `c` is at least as large as the other two sides.

4. Please run your program with all of your test cases from HW2. The results should be identical to that from HW2.

You must supply a listing of your program and sample output.