Foundations of Algorithms
Homework 4

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1. (**project**) Write a function `max2` to compute the maximum of two numbers. It should use *no* comparisons. Assume that other mathematical operations such as $\sqrt{x}$, x^2, $|x|$, etc. do not use any comparisons.

2. (a) CLRS 22.1-1

   (b) CLRS 22.1-8

3. (a) CLRS 22.2-2

   (b) Show that using a single bit to store each vertex color suffices by arguing that the BFS procedure would produce the same result if line 18 were removed.

   (c) CLRS 22.2-5

4. CLRS 22.3-7