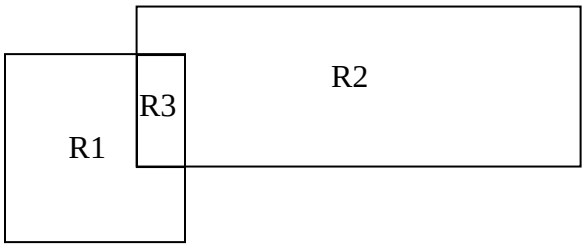
CENG 570
Computational Geometry
Assignment #1

Due Date: March 19, 2014 (submit via ODTU-Class)

Given *N* axis-parallel rectangles in the plane, design a plane sweep algorithm to report the **number** of intersecting rectangle pairs. Two rectangles are also considered as *intersecting* even if they only touch at vertices or edges. If multiple rectangles intersect at the same location, you should count each pair of rectangles separately. For example, the answer for the rectangles below (where there is a third rectangle exactly at the intersection of two rectangles) should be 3.



Provide the pseudo code of your algorithm similar to the ones in the textbook. You may provide additional explanations if you feel it is necessary. What is the computational complexity of your algorithm?