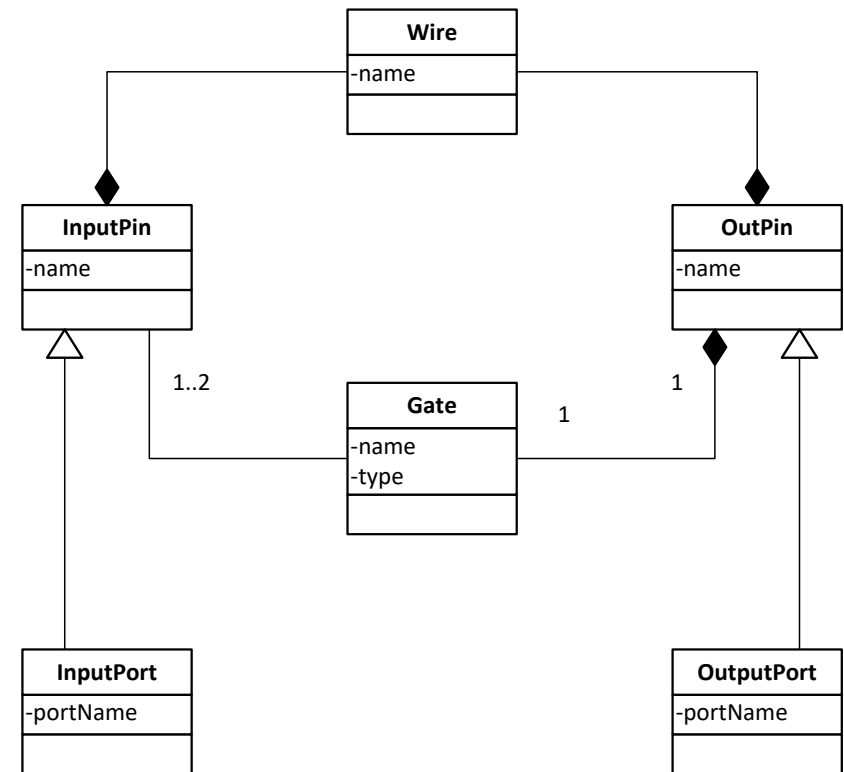
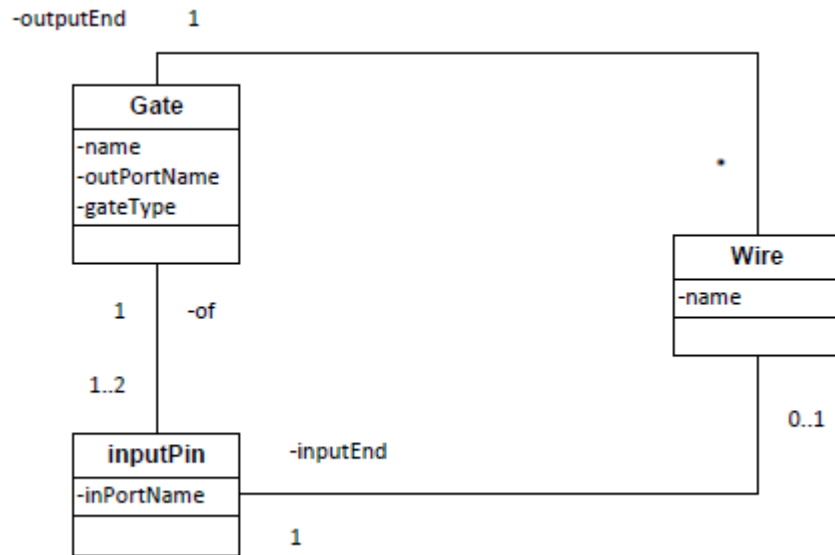
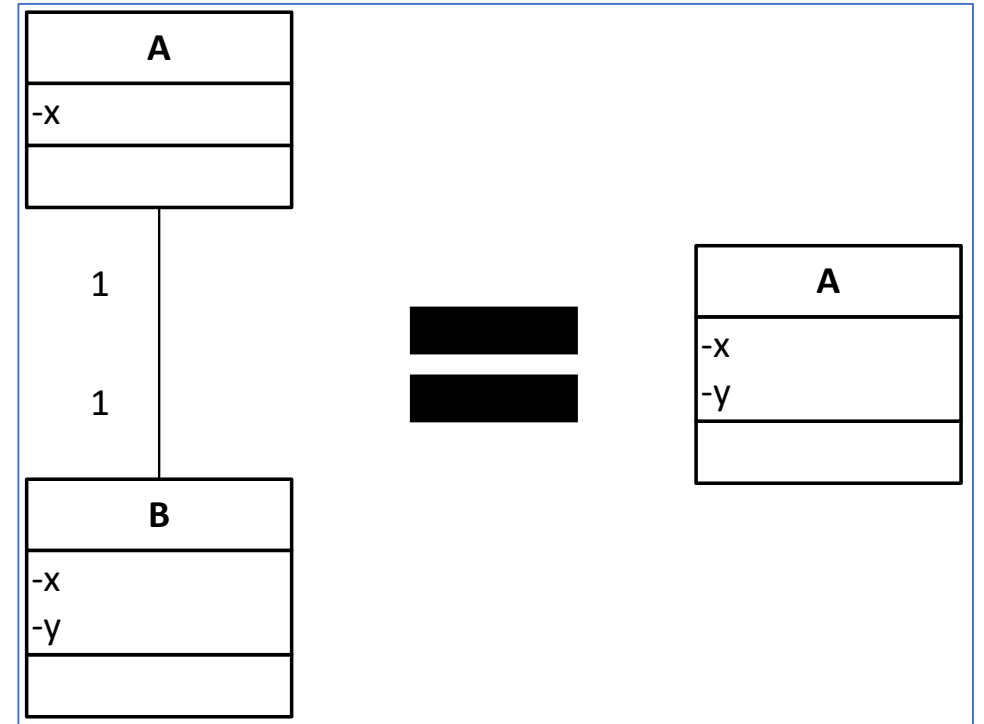
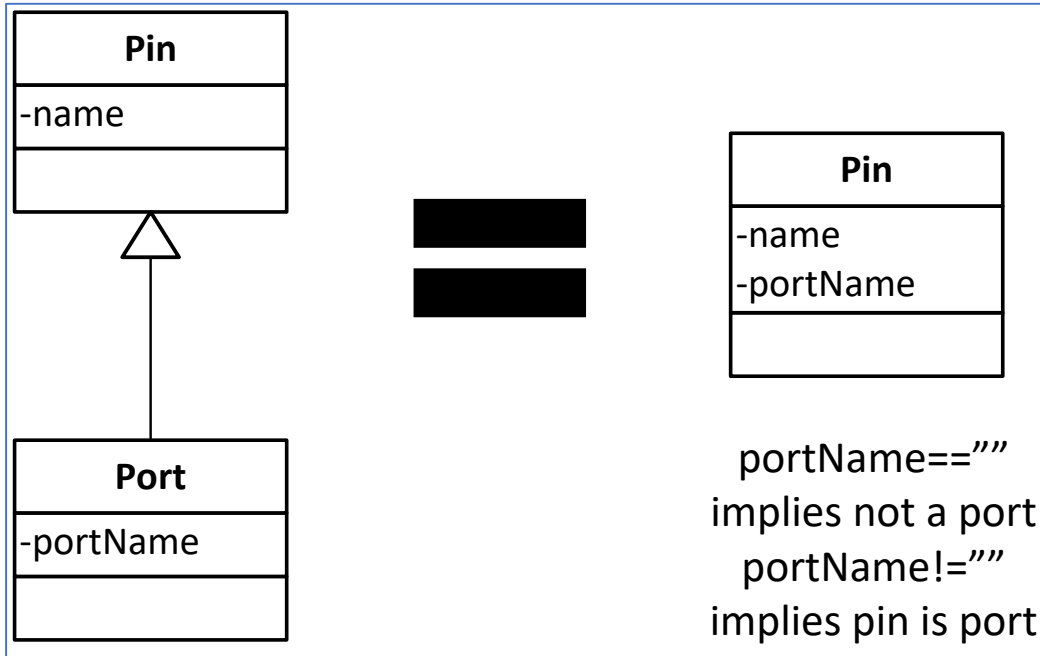


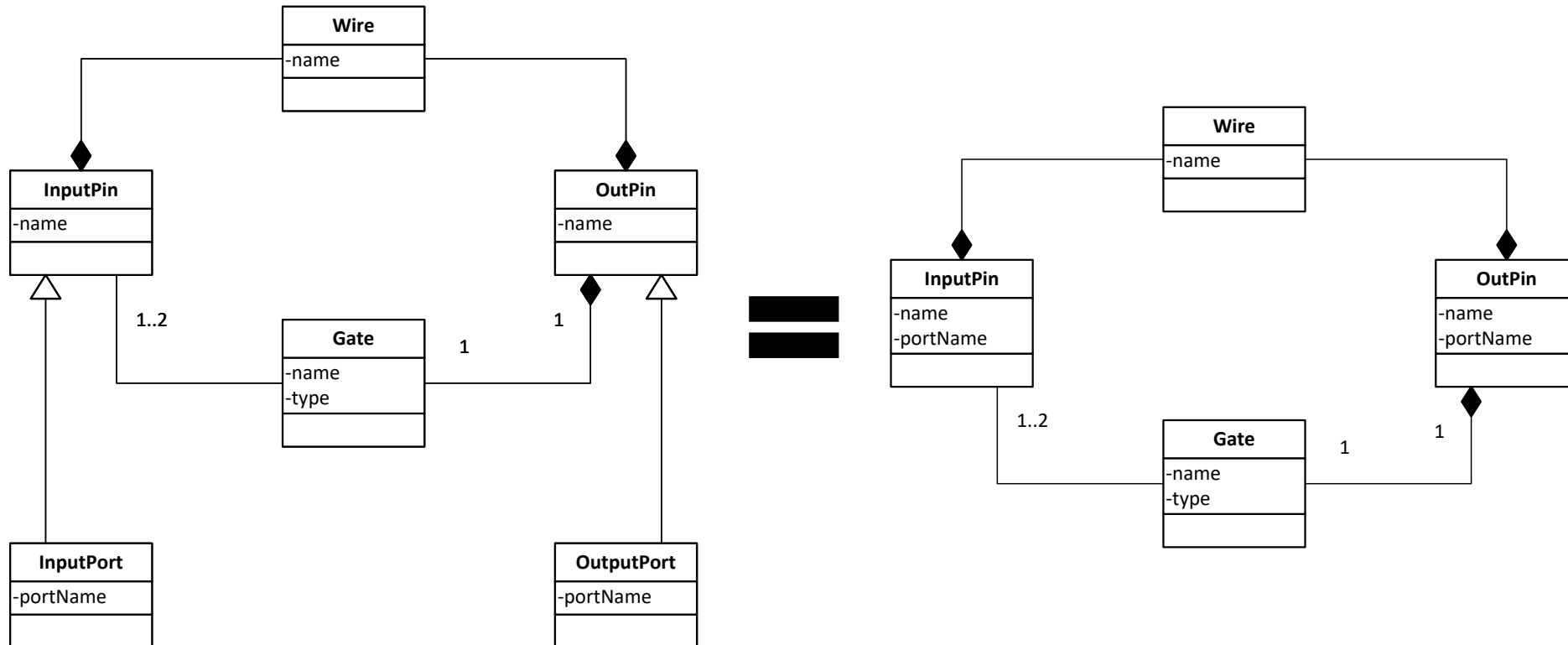
Are they equal?



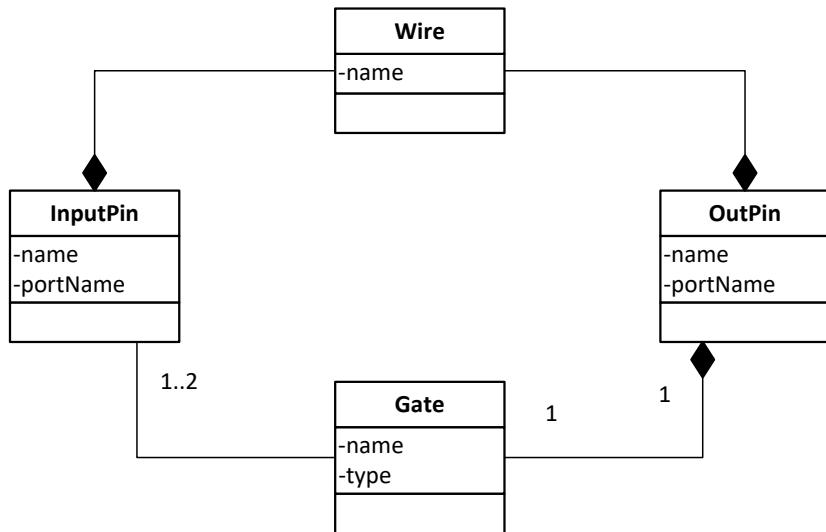
2 rewrites needed



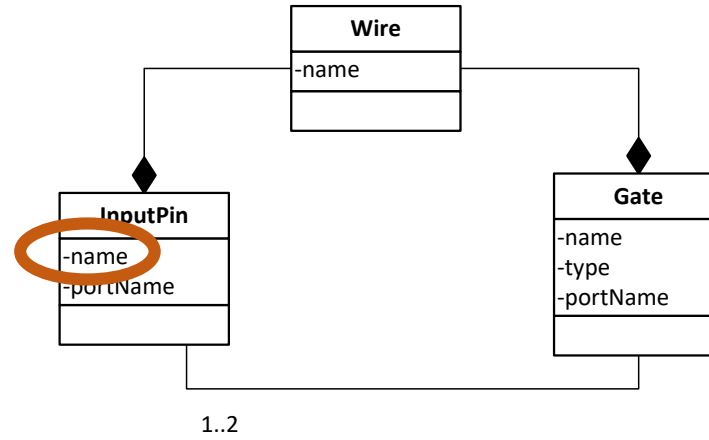
Apply port rewrite



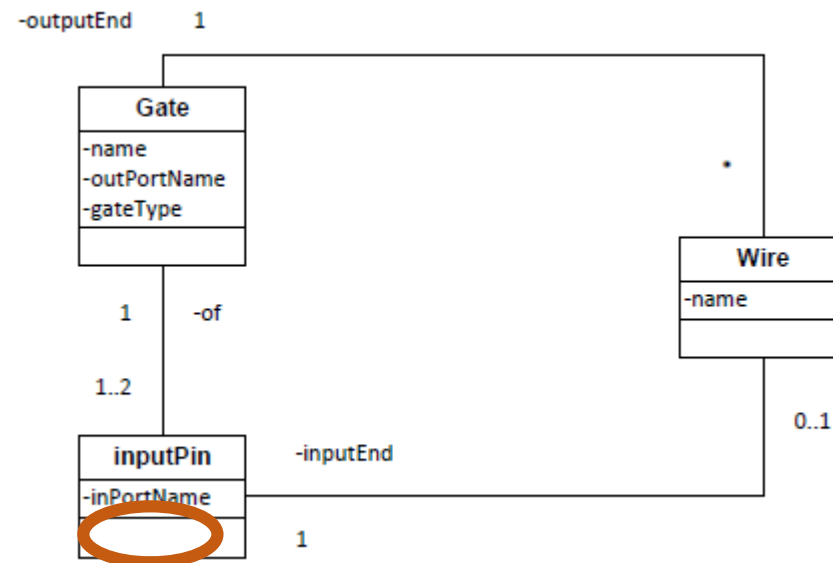
Last...



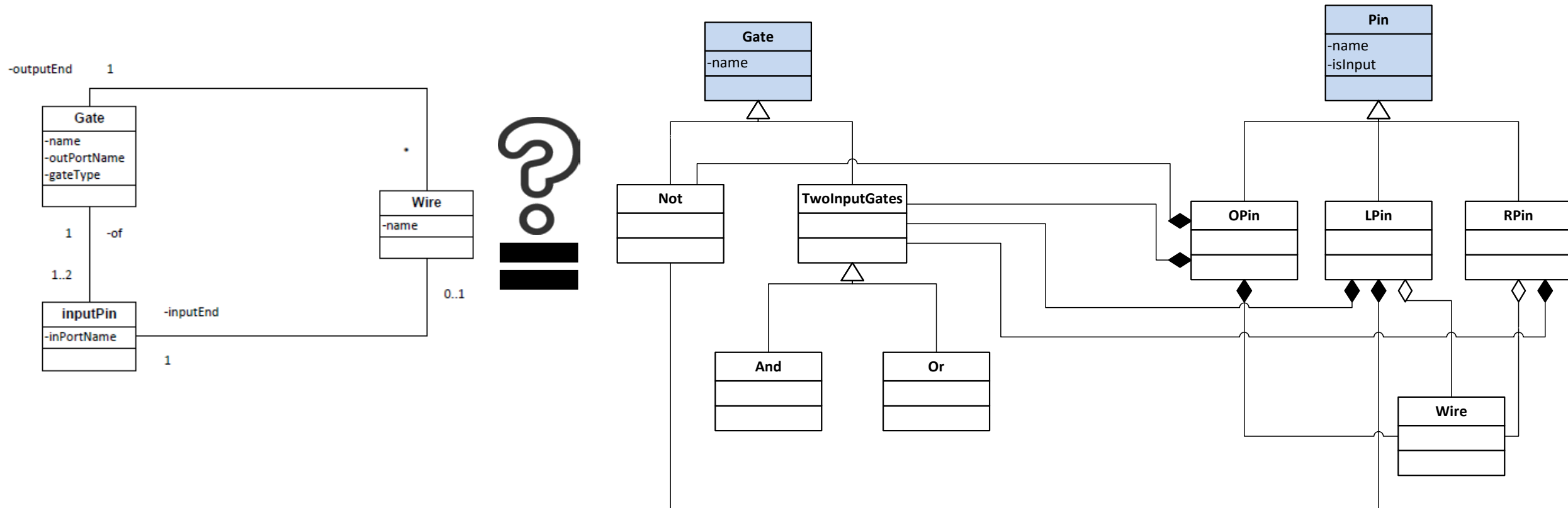
=



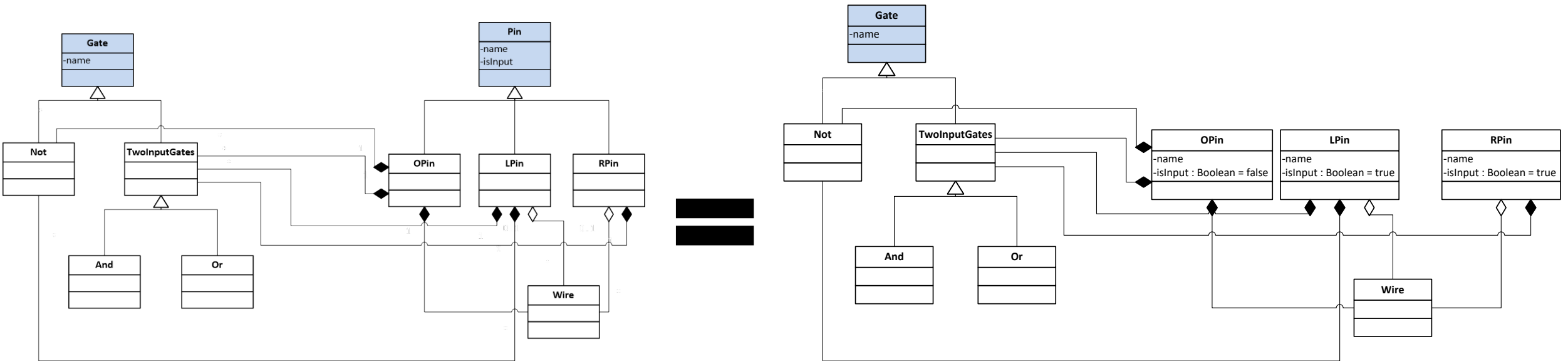
?



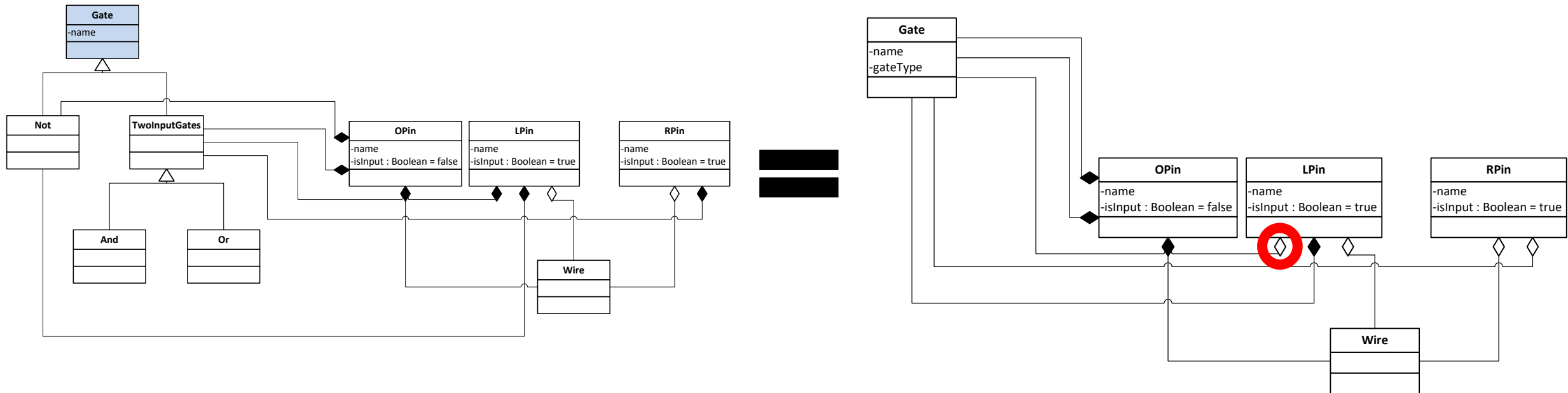
Are they equal?





Push down fields + eliminate Abstract Pin class

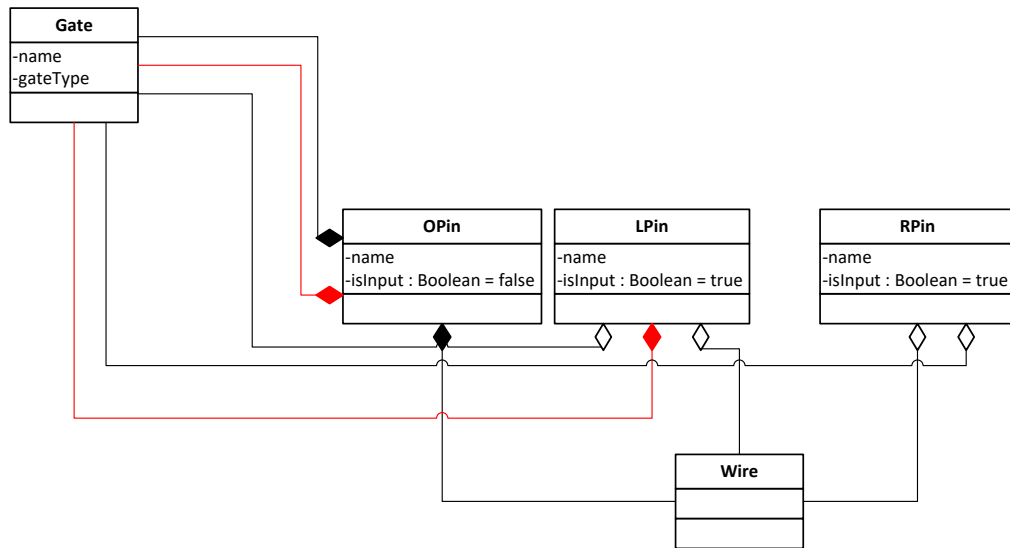


Eliminate all Gates subclasses + add gateType + make Gate non-abstract

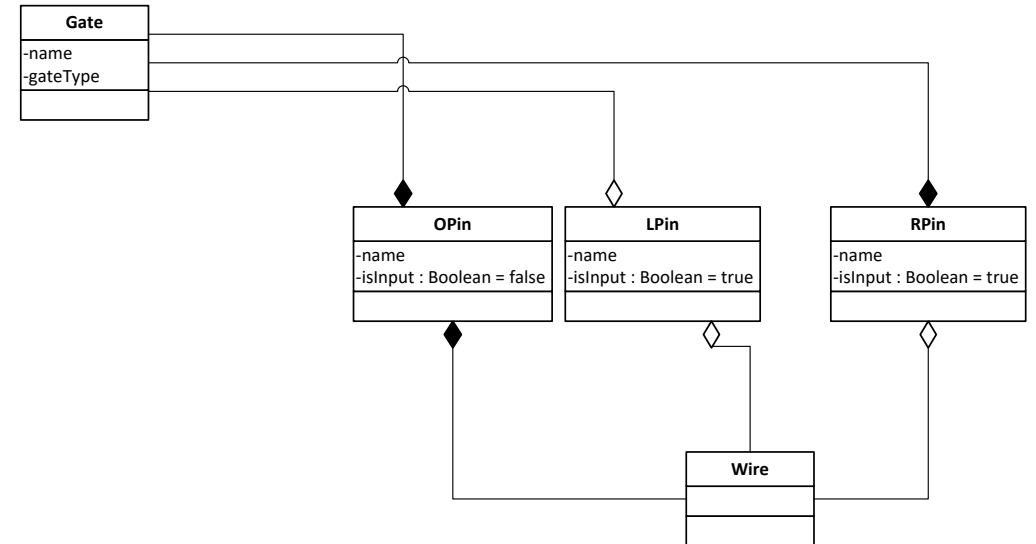


Note conservation of associations
none were lost– but one association
went from  to 

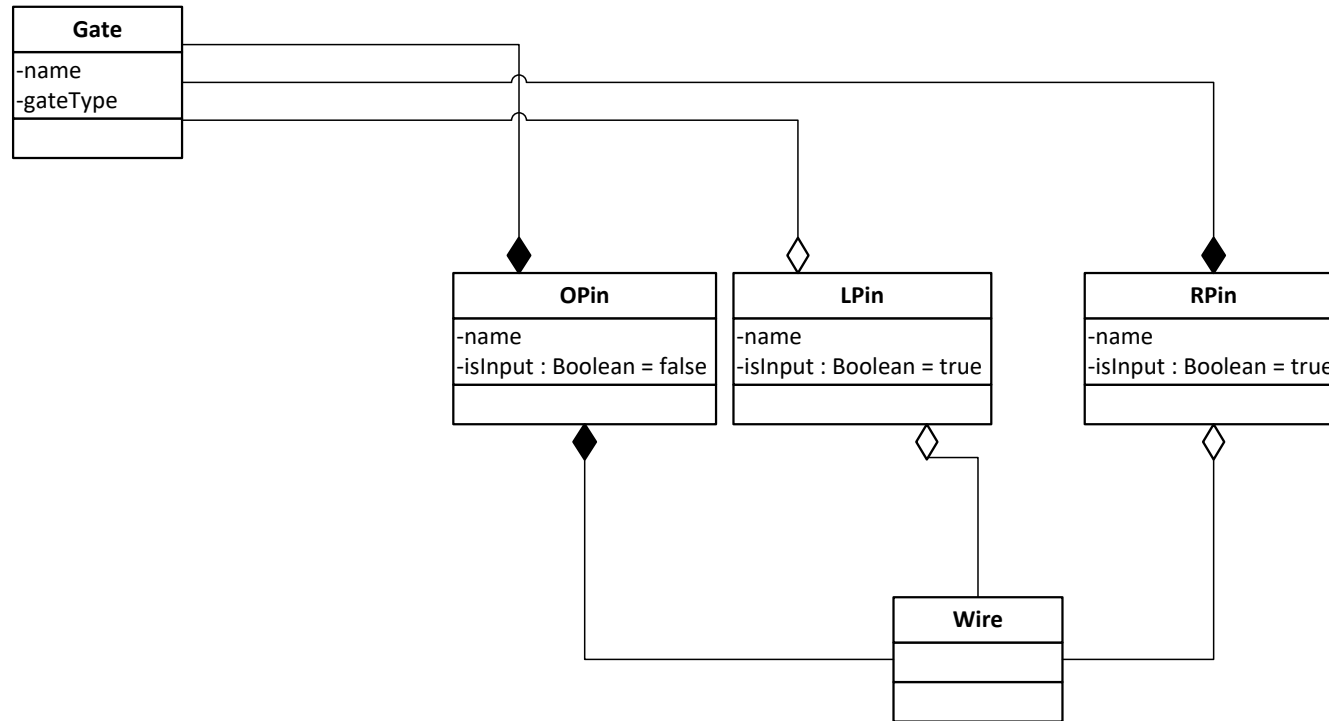
Remove Redundant (and equivalent) associations



=

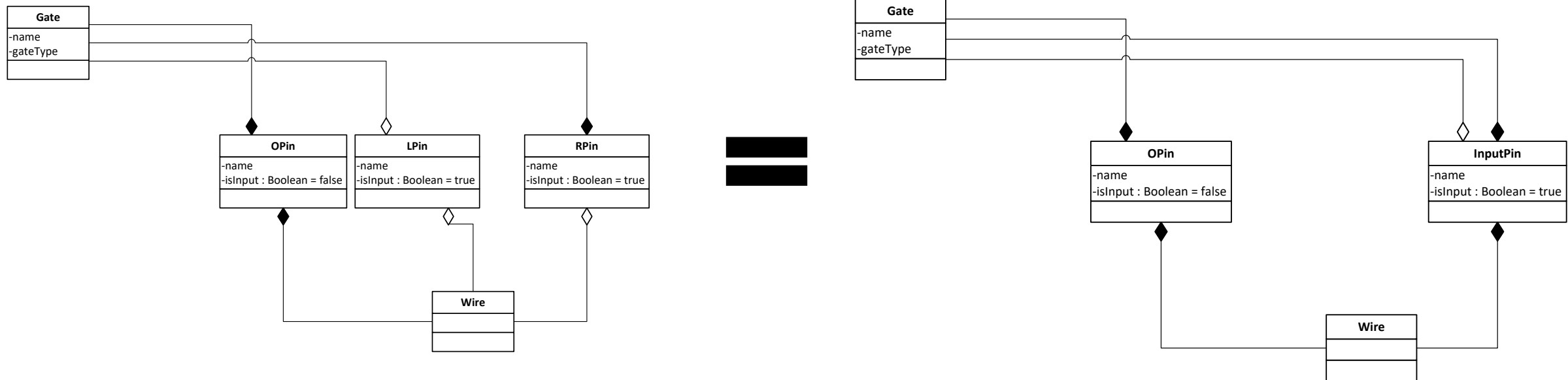


A wire connects 1 output to 1 input (given in problem description)



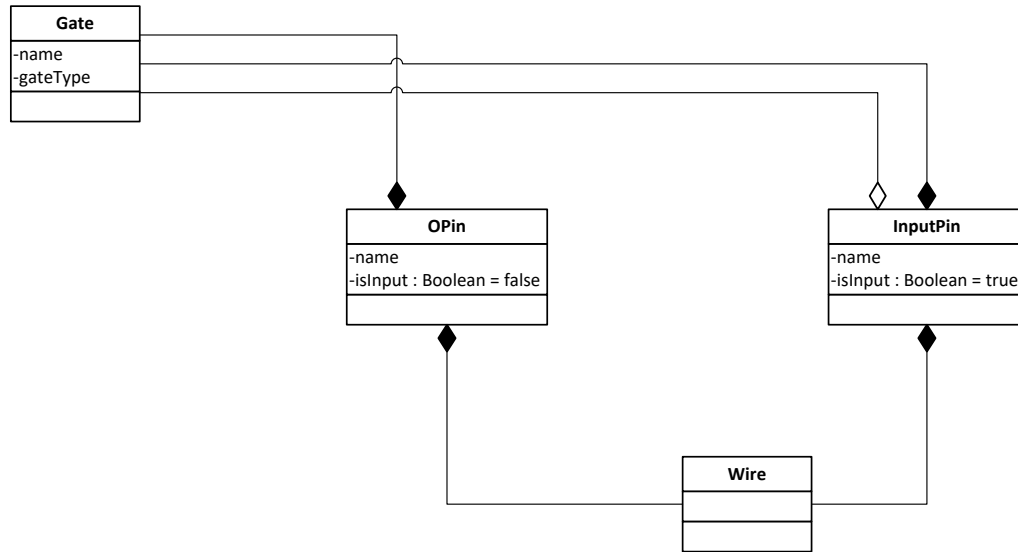
- Each wire connect Opin to precisely 1 Lpin Or 1 Rpin, never both

Merge Lpin and Rpin classes – no need to distinguish them.

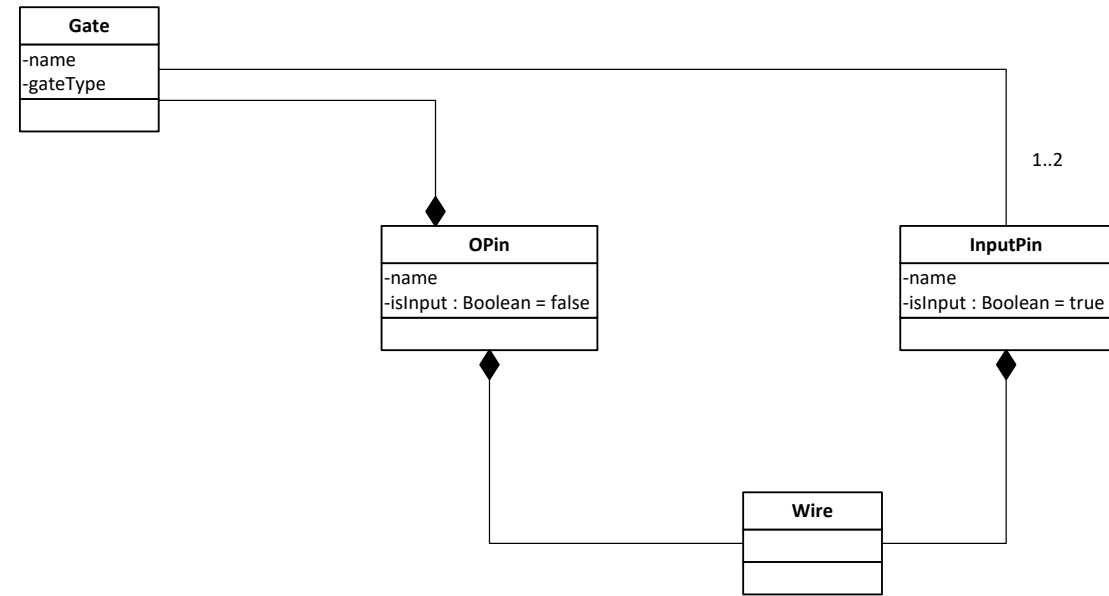


- Each wire connect Opin to precisely 1 Lpin Or 1 Rpin, never both

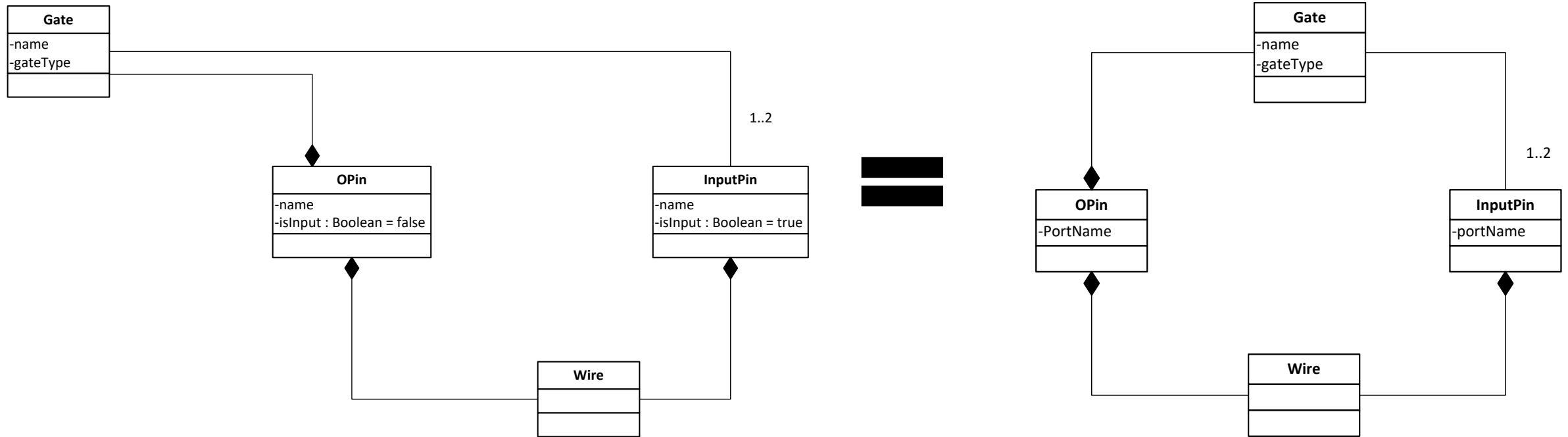
Merge 2 associations as they are now indistinguishable



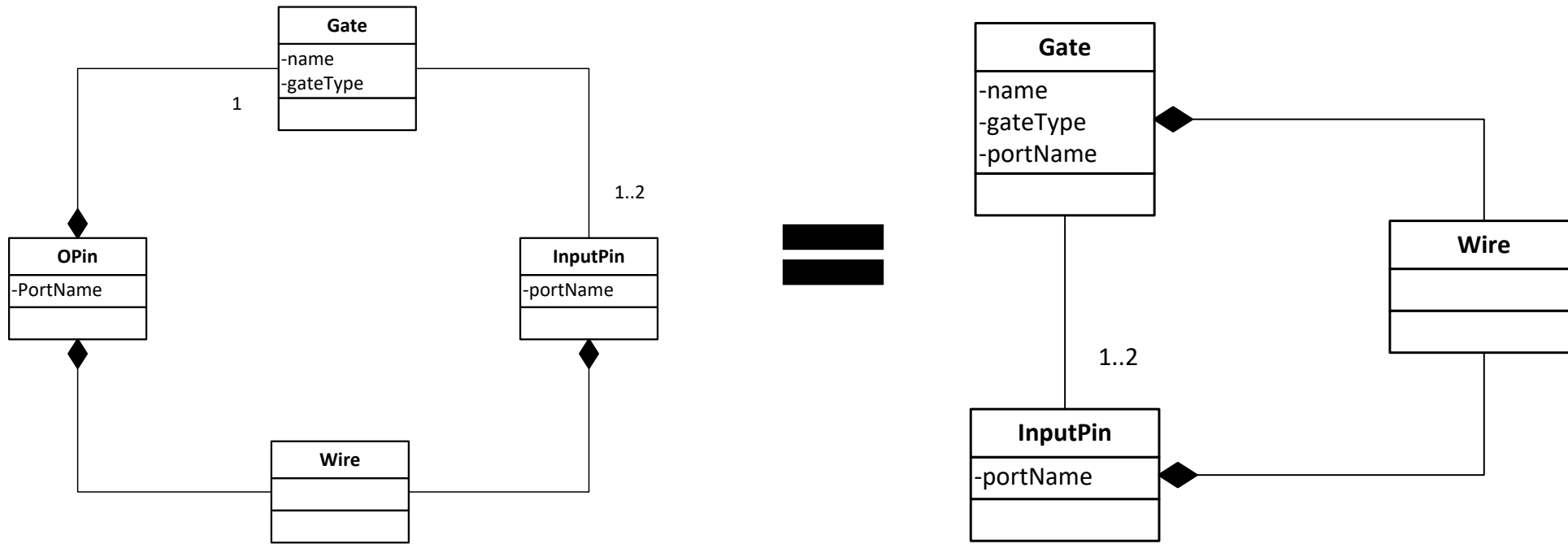
=



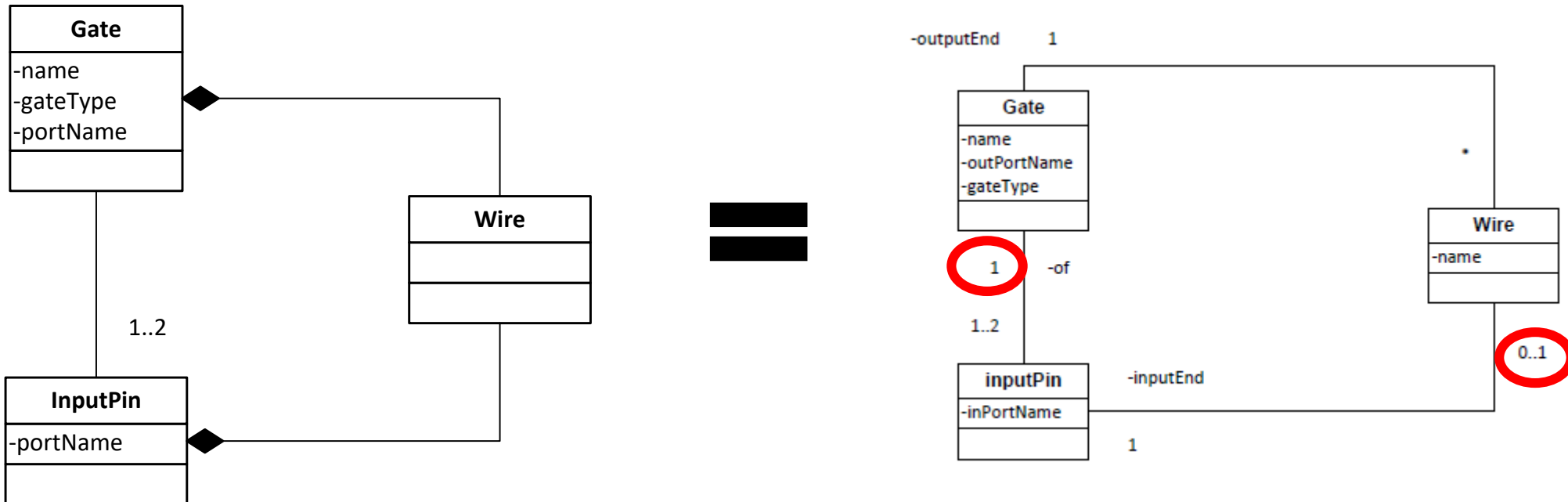
Assume pin 'name' = 'portName'; drop unneeded field



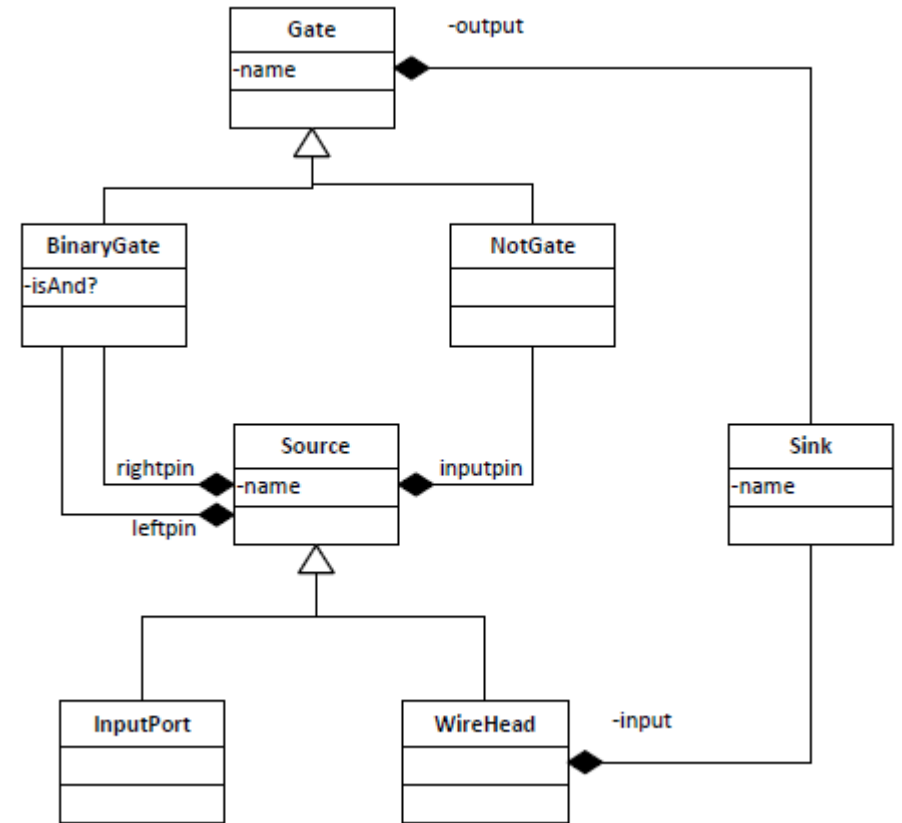
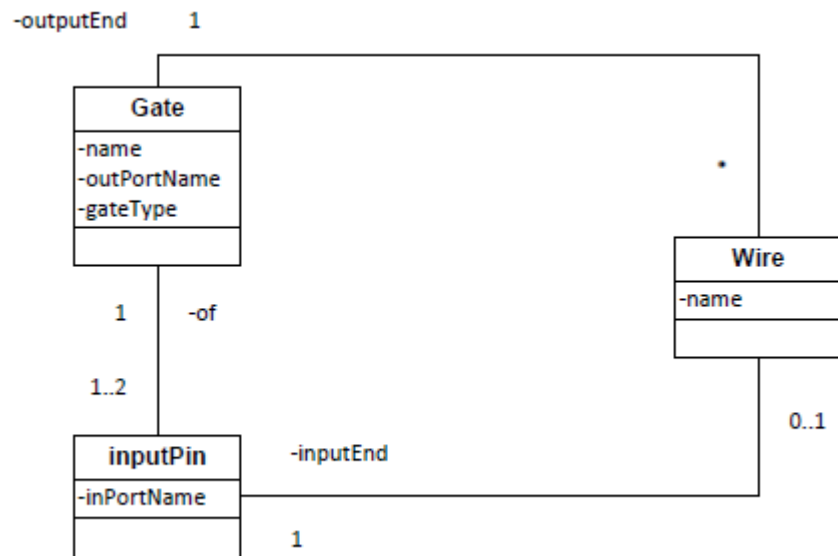
Assume each Gate has precisely 1 output pin



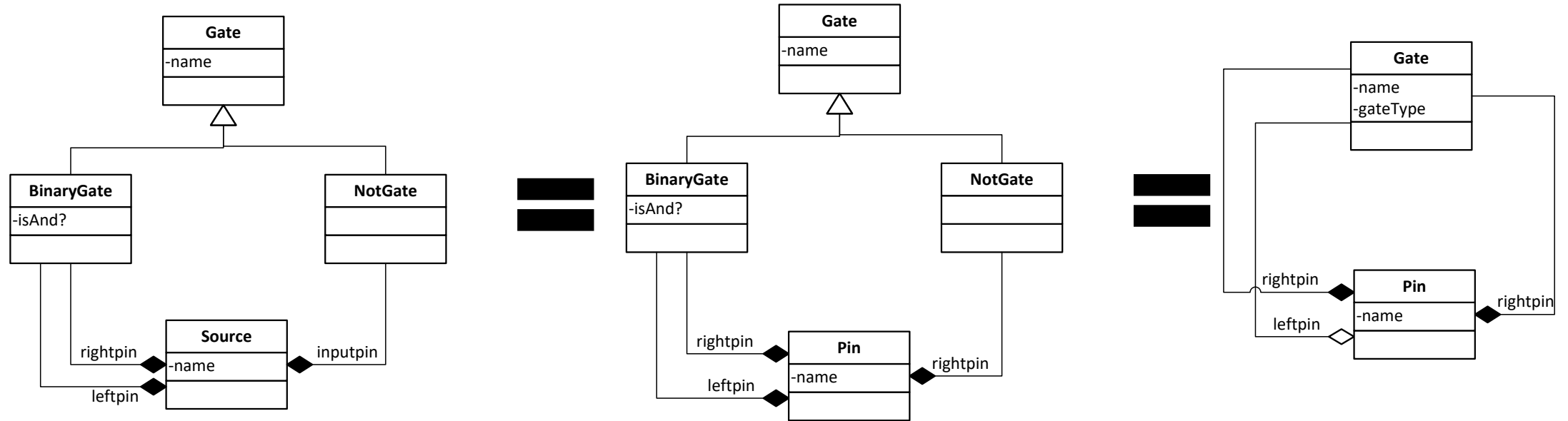
What's left? Make 2 assumptions that add the circled cardinalities



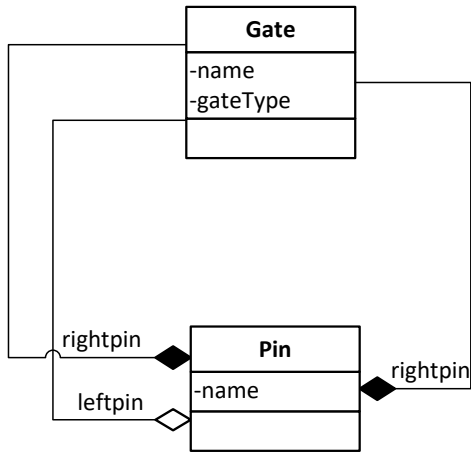
Are they equal?



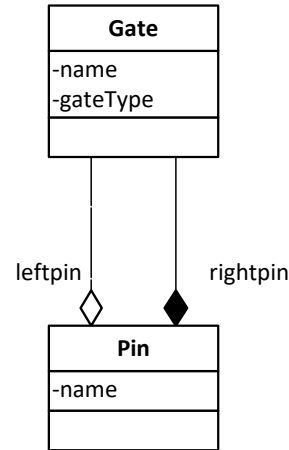
2 rewrites (at least)



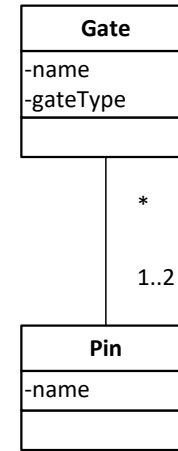
2 more rewrites



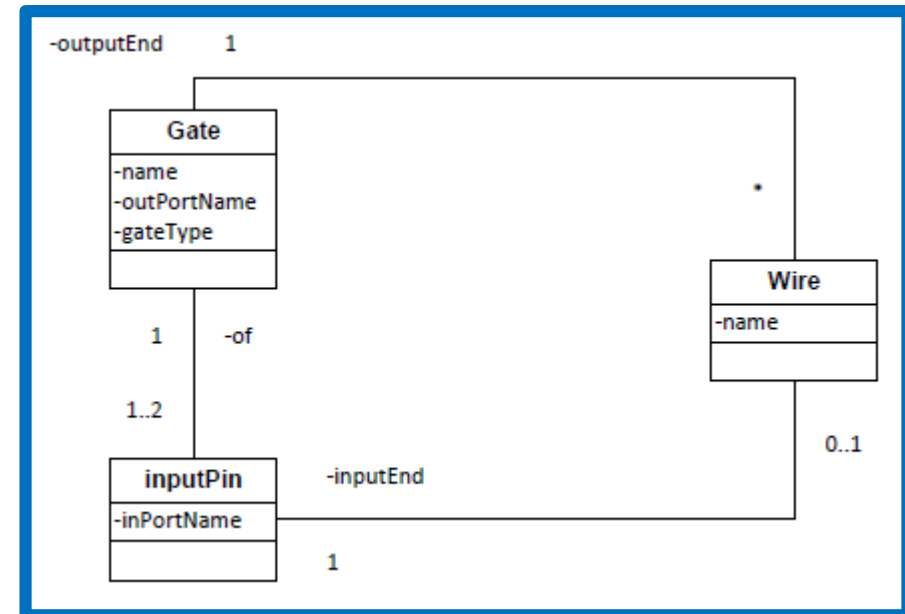
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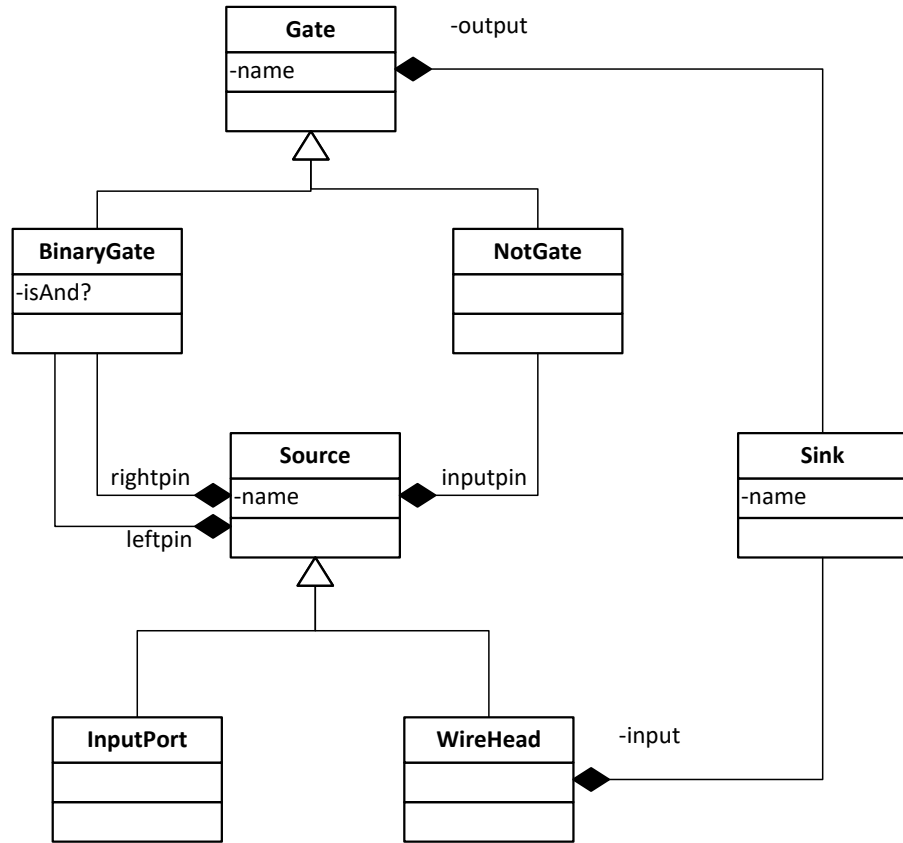
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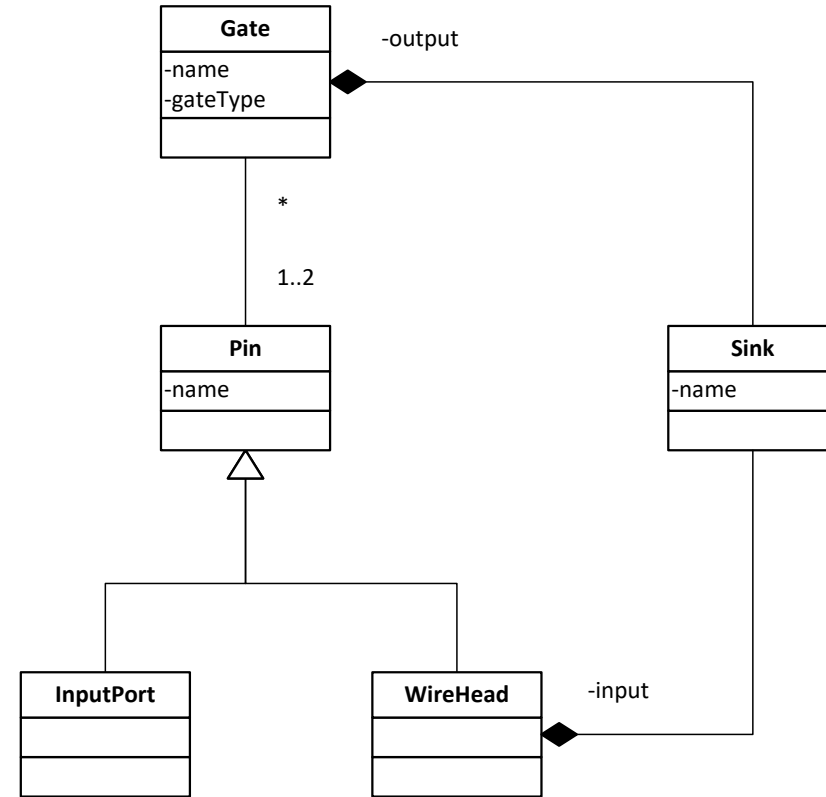
Where we
Are going



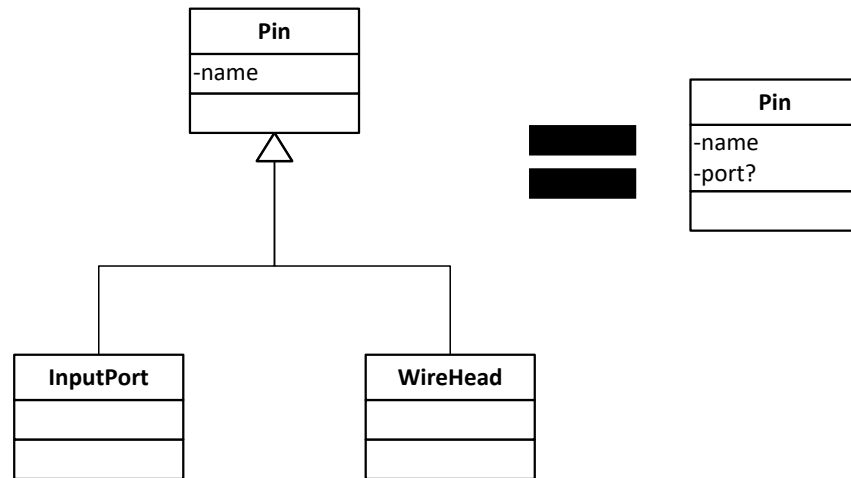
Where are we???



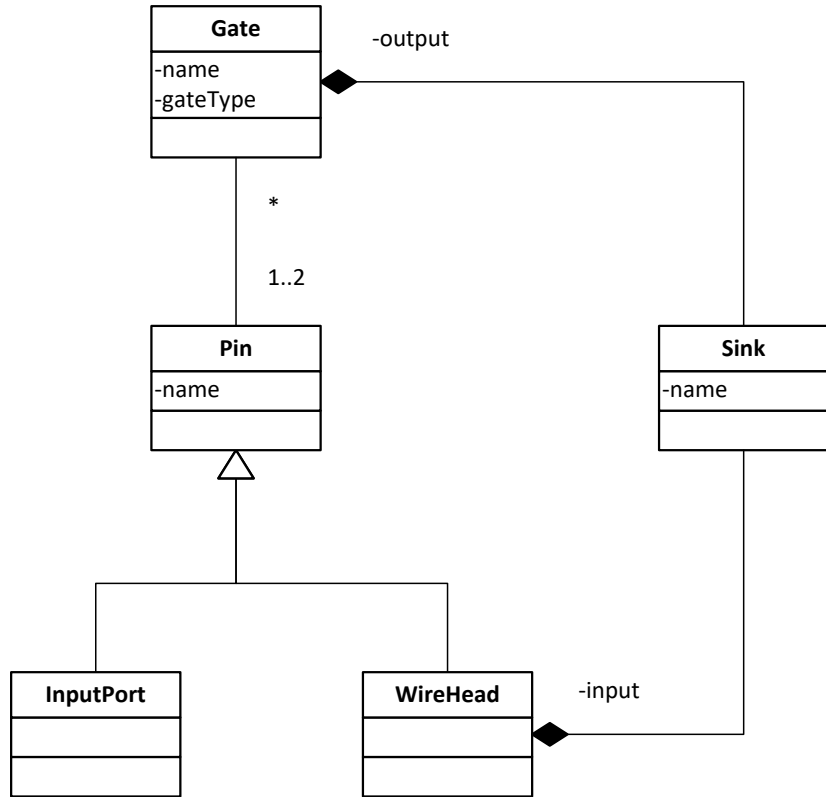
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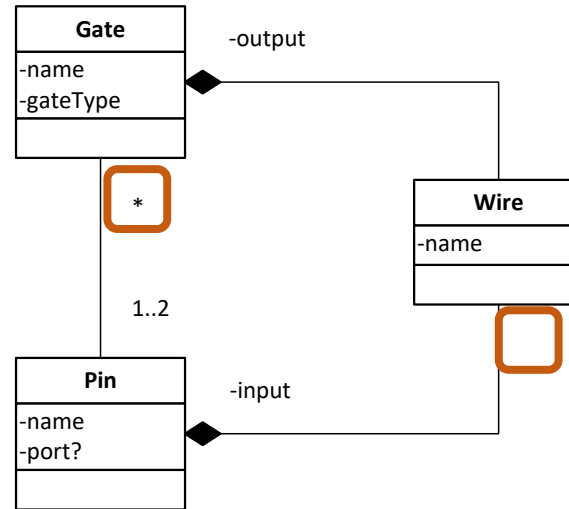
2 more rewrites



Finally



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Where we
Are going

