



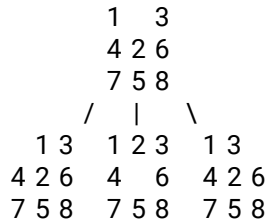
Problem #2

Draw the search tree that would be generated by a breadth-first search when solving the eight-puzzle from the starting configuration below.

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1 2 3
4 5 6
 7 8
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Problem #3

Suppose the search tree below is being constructed to solve the eight-puzzle using the-number-of-tiles-out-of-place as the heuristic. In each blank under a terminal node, write the heuristic value of the associated node. Then, circle the node that the search would pursue next.



Problem #4

Complete the search tree generated by a best-fit heuristic search when solving the eight-puzzle from the starting configuration below if the-number-of-tiles-out-of-place were used as the heuristic? How many nodes would be in the search tree?



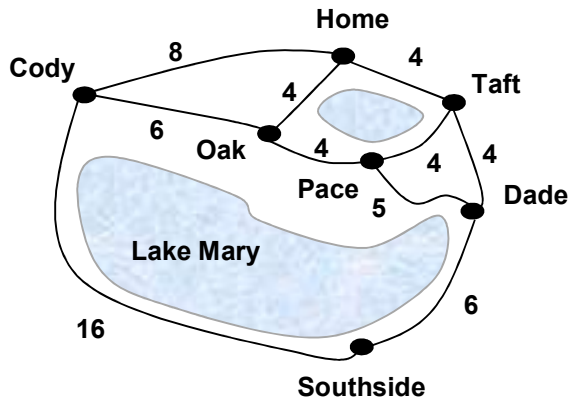
Problem #5

Draw the search tree that would be generated by a best-fit heuristic search when solving the eight-puzzle from the starting configuration below assuming that "the number of tiles out of place" were used as the heuristic.



Problem #6

For the following map:



Straight line distance to Southside from:

Cody	11
Dade	5
Home	9
Oak	7
Pace	6
Taft	8

Draw the search tree generated by a best-fit search in finding a path from Home to Southside assuming that "the straight line distance to Southside" were used as the heuristic. What is the found path?