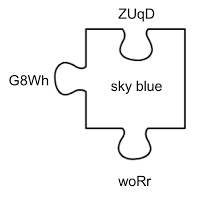
**Jigsaw Puzzle**

In this lab, you will write a program to solve a jigsaw puzzle described in a text file. Here is a description of a single jigsaw puzzle piece.

ZUqD ---- woRr G8Wh 150 200 255

This piece represents a single pixel in a larger picture. The red, green, and blue component values of the pixel appear in the description of the puzzle piece. This one has a red value of 150, green value of 200, and blue value of 255. Overall, it appears as sky blue.

Each piece also connects to up to four other puzzle pieces, one on each side. This piece has a ZUqD-shaped connector, a woRr-shaped connector, and a G8Wh-shaped connector. The ---- indicates that one side is flat, so this is an edge piece. Currently, this piece is arranged so that the ZUqD connector is on the top, the flat edge is on the right, the woRr edge is on the bottom, and the G8Wh edge is on the left, as shown below.



Here is a description of the *same* puzzle piece, rotated clockwise so that the flat edge is now on the bottom.

G8Wh ZUqD ---- woRr 150 200 255

If this piece is part of a jigsaw puzzle, there must be exactly one other piece with a ZUqD connector. When the puzzle is solved, those two pieces will connect.

Here is a description of a full jigsaw puzzle:

ZUqD ---- woRr G8Wh 150 200 255

7RPs oS7q HPAt ---- 150 200 255

GIWd G8Wh uJJ0 oS7q 0 0 0

woSz uJJ0 j3bu ---- 150 200 255

---- ---- j3bu woRr 0 0 0

HPAt woSz ---- ---- 0 0 0

ZUqD YWgp ---- ---- 0 0 0

YWgp GIWd PbSa ---- 150 200 255

---- PbSa 7RPs ---- 0 0 0

This puzzle has nine pieces that form a 3 x 3 square (note that not all puzzles are square). When solved, this puzzle appears as a black X on a sky-blue background. You might find it helpful to solve it by hand before writing any code. Solve the puzzles in the provided text files, inside the lab folder.

*The* ***Jigsaw Puzzle*** *assignment by Dave Feinberg  
https://sites.google.com/site/feinbergcompsci/home/hcs2/labs/jigsaw*