Part(a):

private boolean toBeLabeled(int r, int c, boolean[][] blackSquares)

{

return (!(blackSquares[r][c]) &&

(r == 0 || c == 0 || blackSquares[r - 1][c] ||

blackSquares[r][c - 1]));

}

Part(b):

public Crossword(boolean[][] blackSquares)

{

puzzle = new Square[blackSquares.length][blackSquares[0].length];

int num = 1;

for(int r = 0; r < blackSquares.length; r++)

{

for(int c = 0; c < blackSquares[0].length; c++)

{

if (blackSquares[r][c])

{

puzzle[r][c] = new Square(true,0);

}

else

{

if (toBeLabeled(r, c, blackSquares))

{

puzzle[r][c] = new Square(false, num);

num++;

}

else

{

puzzle[r][c] = new Square(false,0);

}

}

}

}

}