

Bret Elphick
CSC 230
Project 1 Pseudocode
10/6/20

algorithm findMatch is

input: number of rows,
 number of columns,
 matrix of characters,
 user entered words

output: character matrix colored red corresponding to word matches:

 if the user entered word matches a word in the matrix in one of the eight directions
 (left, right, upward, downward, and diagonals), then it is colored in red

for each point (i, j) **in** the character matrix **do**

if character at point (i, j) is equal to the first character of user entered string
 assign character at the point to first index of temp string;

for each direction **do**

 apply proper increment or decrement to (i, j);

if the matrix word is out of bounds in that direction
 exit this loop and do not check for match;

else

 save the matrix word into the temp string character by character;

if the user word is equal to the matrix word

 mark the separating matrix true (boolean type);

if point in separating matrix is true

 character at that point is printed in red;

else

 character at that point is printed in default color;