```
Function main(words to find, matrix file){
        Get input from matrix file, store in character matrix
        Creates a second matrix to store the positions of matching characters
        For every word inputed by the user(call findandmark)
       After all words are marked print the matrix using color rules (call printmatrix)
Function printmatrix (character matrix, position matrix){
        For Each letter in the matrix prints out a red or black letter depending on corresponding
values in the position matrix
FindAndMark (matrix, position matrix, word) {
        iterate over each letter of the character matrix
       If it contains the first letter of the given word
               Check for the next letter in every direction surrounding it(call directional search)
}
directonalSearch(matrix, position matrix, word, first letter coordinates ){
        For each of 8 directions if found the word in that direction (call findwordIndirection)
               Then mark the position matrix (call markPMatrix)
findwordinDirection(character matrix, word, first letter coordinates, direction incriments){
               Check if you would go out of bounds
               Returns false if any letter doesn't match
               Otherwise, return true
markPmatrix(position matrix, first letter coordinates, word length, direction increments){
       Sets each corresponding letter position value to true
}
```