

Required functions:

1. separateMaterialKeywords() string -> list
 - a. This function takes the user's input and separates the keywords into a list based on spaces
 - b. Calls searchForMaterial()
2. searchForMaterial() list -> string
 - a. This function searches through the list given by separateMaterialKeywords() for any word matching "yarn", "thread", "felt" or anything similar
 - b. If no such term exists, move to the next function call
 - c. Must check that the item before that word in the list is not "not"
 - i. If it is, eliminate that group of materials from possible search results
 - d. Any matching term is added to the user's temporary database
 - e. Idea behind this: it narrows down what we have to search through in the database because the database will be separated by material
 - f. Sets materialType to either "yarn", "thread", "felt", or ""
 - g. Calls searchForBrand()
3. searchForBrand() list -> string
 - a. This function searches through the list given by separateMaterialKeywords() for any word matching "Lion Heart", "Bernat", "Red Heart", "Gutermann", "Superior Threads" or anything similar
 - b. If no such term exists, move to the next function call
 - c. Must check that the item before that word in the list is not "not"
 - i. If it is, eliminate that brand from possible search results
 - d. Any matching term is added to the user's temporary database
 - e. Idea behind this: it narrows down what we have to search through in the database because the second level of organization in the database is the brand type
 - f. Sets materialBrand to either "", "Lion Heart", "Bernat", "Red Heart", "Gutermann", "Superior Threads", etc.
 - g. Calls searchForColor()
4. searchForColor() list -> string
 - a. This function searches through the list given by separateMaterialKeywords() for any word matching "Red", "Yellow", "Green", "Blue", "Purple", "Black", "Orange", "White" or anything similar

- b. If no such term exists, move to the next function call
 - c. Must check that the item before that word in the list is not “not”
 - i. If it is, eliminate that color from possible search results
 - d. Any matching term is added to the user’s temporary database
 - e. Idea behind this: it narrows down what we have to search through in the database because the third level of organization in the database is the color
 - f. Sets materialColor to either “”, “Red”, “Yellow”, “Green”, “Blue”, “Purple”, “Black”, “Orange”, “White”, etc.
 - g. Calls narrowMaterials()
5. narrowMaterials() input from form -> null
- a. This function takes the inputs from the form that the user could optionally fill out and narrow down the search even further
 - b. If no such input exists, move to the next function call
 - c. Checks for material, brand, and color
 - d. If one of the string variables is empty from the previous three functions but there is an input from the form, replace the “” of the function with the specifications given
 - e. Call compileMaterialResults()
6. compileMaterialResults strings -> list
- a. Puts all strings into a list in this exact format: (materialType, materialBrand, materialColor)
 - b. Calls searchMaterialDatabase()
7. searchMaterialDatabase() list -> search results on screen
- a. Based on the list of terms in the user’s temporary database, this function navigates through the database of terms based on the level of organization to return the closest search result possible
 - b. If the original input from the user exactly matches something in the database, pull that and then the next 10 results
 - c. Otherwise, pull materials from the exact level of organization that was narrowed down to
 - d. On the first page, pull the closest 10 results

Required Variables:

1. separatedMaterialSearch : list
 - a. Created in the separateMaterialKeywords() function
2. originalMaterialSearch : string
 - a. Unaltered input from the user in the search bar

3. materialType : string
 - a. Is either "", "yarn", "thread", "felt", or anything similar
4. materialBrand : string
 - a. Is either "", "Lion Heart", "Bernat", "Red Heart", "Gutermann", "Superior Threads", or anything similar
5. materialColor : string
 - a. Is either "", "Red", "Yellow", "Green", "Blue", "Purple", "Black", "Orange", "White"
6. finalMaterialSearch : list
 - a. List created in compileMaterialResults()