Program Design

## Input

1. In detail indicate what the inputs to this program are?
   1. There will be a menu and the user can input the options on the menu
   2. Then when the user wants to modify the database, they will input the answer/question/linkage that they want to modify
2. How do you validate the input
   1. Anything that goes in between tags must not contain ‘<’ or ‘>’ because it will cause the program to misinterpret those as a part of the tag
3. Pseudocode: Briefly explain how this section will look like
   1. Input(menu\_option)
   2. If (menu\_option == 1), doSomething
   3. If (menu\_option == 2), doSomething
   4. Input(question) or input(answer) or Input(linkage)
   5. If (question or answer or linkage contains ‘<’ or ‘>’), print error message. Input again

## Processing

1. What is this program calculating?
   1. Parse the xml inside the plist file
   2. Change the content of the plist file
   3. Link questions and answers together
2. Can we divide the calculations to the smaller “modules”
   1. Loop to look for “<key>answers</key>” or “<key>questions</key>” depending on the user input
   2. Then, find “<key>text</key>”. The line after “<key>text</key>” would be the xml that contains the text of the answer
   3. Extract the text in between the tags
3. Pseudocode: Briefly explain how this section will look like – Each module should have its own section.
   1. While (not the end of file), lookFor(“<key>answers</key>” or “<key>questions</key>”)
   2. LookFor(“<key>text</key>”)
   3. getTheNextLine(next\_line)
   4. extractText(next\_line)

## Output

1. What will this program display to the users?
   1. A menu that the user can select from
   2. Questions and answers already inside the plist file
   3. Linkage between questions and answers in the plist file
2. What kind of formatting this output will use (Currency with $ …)?
   1. no
3. Pseudocode: Briefly explain how this section will look like
   1. Output(menu\_options)
   2. Output(questions), output(answers)
   3. Output(linkage) for linkage in question\_answer\_linkages