Pseudocode for P5:

Code Crackers...

Begin:

1. Define constants:

   - initialYear = 1900
   - secondsInMonth = 30.44 * 24 * 3600 // Average Seconds in a Month
   - MAX_FILES = 100

2. Define a structure FileData with fields: name, date, size, accesscount

3. Define function isFileOlderThanNMonths(DateString, numMonths):

   3.1. Split DateString into Day, Month, Year

   3.2. Convert Day, Month, Year to time_t structure

   3.3. Calculate difference in seconds between current time and file creation time

   3.4. Calculate difference in months

   3.5. Return true if differenceinmonth >= numMonths, else return false

4. Define function deleteFiles(files, count, N, M):

   4.1. Initialize an empty string deletereasons

   4.2. Loop through each file in files:

      4.2.1. Initialize newcopyavailable to false

      4.2.2. Loop through each file in files:

         4.2.2.1. If i is not equal to j and files[i].name is equal to files[j].name and files[i].date is older than files[j].date:

   - Set newcopyavailable to true
   - Break the loop

      4.2.3. If any of the following conditions are true:

   - File is older than N months
   - File size is 0
   - A newer copy of the file is available

- File has been accessed less than M times

  Then:

  4.2.3.1. Generate deletion reason based on conditions

  4.2.3.2. Append deletion reason to deletereasons

  4.2.3.3. Shift elements to the left to fill the gap

  4.2.3.4. Decrement count

  4.2.4. Otherwise, increment i

4.3. Return deletereasons

5. Define function main():

5.1. Initialize a string choice

5.2. Loop:

5.2.1. Prompt user to enter folder name, N months, and M access count

5.2.2. Read folder name, N, and M from user

5.2.3. Initialize count to 0

5.2.4. Open folder with the given name and count the number of lines to determine the number of files

5.2.5. Initialize an array of FileData struct with size count

5.2.6. Read file data from folder and populate the array

5.2.7. Call deleteFiles function with the array, count, N, and M and store the deletion reasons

5.2.8. Open the folder for writing and overwrite its content with the updated file data

5.2.9. If deletion reasons are empty:

- Print "No file deleted."

5.2.10. Else:

- Print "Files deleted successfully."
- Print "Deletion Reasons:"
- Print deletion reasons

5.2.11. Prompt user if they want to continue

5.2.12. Read choice from user

5.2.13. If choice is not "yes", exit the loop

5.3. End loop

End