# Pseudocode Design

# Pseudocode for C source file “util.c”

*Variable declaration*:

* Declare a global constant MAX\_LINES\_PER\_PAGE.
* Declare a global integer variable line\_count and initialize its value to MAX\_LINES\_PER\_PAGE.

*Function declaration*:

**int** **main**(**void**)

*Pseudocode for main*:

* Fetch the source file name from the command line argument
* Call the init\_lister passing the source file name
* Return 0 if no error
* Return 1 if error

# Pseudocode for C source file “otherfunct.c”

*Variable declaration*:

* None

*Function declaration*:

**void init\_lister(string)**

**boolean get\_source\_line()**

*Pseudocode for init\_lister*:

* Create a local variable “source\_name” of type string and save the input source file name to this variable.
* open the source file parameter “source\_file”, and set the date and time string
* Continuously calling the function “get\_source\_line” to read and print a source lines until it returns false.

*Pseudocode for get\_source\_line*:

* fill the variable “source\_buffer” with the contents of the next source line.
* Use variable “line\_number” to keep track of the line number.
* Call the function print\_line go print a line
* returns TRUE if it successfully reads and prints a line
* If it reached the end of the source file instead it returns FALSE

# Pseudocode for C source file “printfunct.c”

*Variable declaration*:

* none

*Function declaration*:

**void print\_line(string)**

**void print\_page\_header()**

*Pseudocode for function print\_line*:

* print the source line, along with its line number
* Decrement the value of the variable “line\_count” by 1 for each line printed
* If line count = 0 then call “print\_page\_header” function to print the header

*Pseudocode for function print\_page\_header*:

* Print the page header
* Check the current line to see if it will fit on one printed line. Truncate if the line is too long then restore it to the original length.
* Re-initialize the variable line\_count to the constant MAX\_LINES\_PER\_PAGE

# Pseudocode for C header file “utilheader.h”

*Variable declaration*:

* None

*Function declaration*:

**int main(void)**

**void init\_lister(string)**

**boolean get\_source\_line()**

**void print\_line(string)**

**void print\_page\_header()**

*Pseudocode for utilheader.h*:

* None