

# 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(argv)
```

### *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(char)
```

```
boolean get_source_line()
```

### *Pseudocode for init\_lister:*

- Create a local variable “source\_name” of type char and save the input source file name to this variable.
- open the source file parameter “source\_file”, and set the date and time char.
- 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(char)
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(char)

boolean get_source_line()
void print_line(char)

void print_page_header()
```

*Pseudocode for **utilheader.h**:*

- None.