EHB 110E - Introduction to Scientific and Engineering Computing (C)

Homework-3

Assignment Date :	28.12.2020
Due Date :	04.01.2021 at 18:00
Duration :	1 week

You are given a C header file **(persons.h)** which contains C struct definition of Person, and the initialized array (Liste) of the struct, with several data.
You must include the given header file by using the **#include "persons.h"** directive in your program.
(The header file should be located in the same directory with the main C program source file.)

```
// File Name : persons.h

struct Person
{
 char FName[20]; // First Name
 char LName[20]; // Last Name
};

struct Person Liste[ ] = { ....... };
```

Write a **menu-driven** C program to display the contents of the struct array on screen, as page-by-page.

- Firstly, program should ask user to enter the number of persons to display per one page (**Page Size**).
- Then, program should display the array contents page-by-page, and ask user to enter the **page navigation command** (one char) after displaying a page.
- **Page navigation commands (Menu selections) :**
  - 'F' : Go to first page
  - 'L' : Go to last page
  - 'N' : Go to next page
  - 'P' : Go to previous page
  - 'X' : Exit from program

The following example illustrates how the program should work.
The program should make proper column alignments of first names and last names on screen output.

EXAMPLE SCREEN OUTPUT

```
ENTER NUMBER OF PERSONS PER ONE PAGE (BETWEEN 1-30) : 15

CURRENT PAGE NUM : 1
No FName      LName
== =====      =====
01 Addison    MONTGOMERY
02 Alexa      CARLSON
03 Andrew     THOMAS
04 Anthony    DAVIS
05 Avery      MEYER
06 Bentley    MORRIS
07 Blake      PARKER
08 Brandon    CARTER
09 Brianna    BURKE
10 Carter     SCOTT
```

```
11 Charles    TURNER
12 Charlotte  HARVEY
13 Colton     EDWARDS
14 Daniel     BROWN
15 Elijah     WILSON
ENTER PAGE NAVIGATION COMMAND (F:first, L:last, N:next, P:previous, X:exit) : N
--------------------------------------------------------

CURRENT PAGE NUM : 2
No FName       LName
== =====       =====
16 Elizabeth  CHAPMAN
17 Ella       OLIVER
18 Evelyn     HANSEN
19 Gabriel    ROBINSON
20 Gavin      ALLEN
21 Gianna     BYRD
22 Hailey     GEORGE
23 Harper     HOFFMAN
24 Henry      ROBERTS
25 Hudson     REED
26 Isaac      WALKER
27 Jack       NELSON
28 Jackson    THOMPSON
29 Jacob      SMITH
30 James      JACKSON
ENTER PAGE NAVIGATION COMMAND (F:first, L:last, N:next, P:previous, X:exit) : N
--------------------------------------------------------

CURRENT PAGE NUM : 3
No FName       LName
== =====       =====
31 John       LEWIS
32 Jonathan   WRIGHT
33 Joshua     TAYLOR
34 Kayla      DOUGLAS
35 Leah       BURTON
36 Matthew    MILLER
37 Michael    WILLIAMS
38 Natalie    RICHARDS
39 Nicholas   ADAMS
40 Owen       ROGERS
41 Richard    HOWARD
42 Riley      BAKER
43 Ryan       CLARK
44 Steven     MORGAN
45 Taylor     FRAZIER
ENTER PAGE NAVIGATION COMMAND (F:first, L:last, N:next, P:previous, X:exit) : N
--------------------------------------------------------

CURRENT PAGE NUM : 4
No FName       LName
== =====       =====
46 Thomas     CAMPBELL
47 Tyler      KING
48 Victoria   MORRISON
49 William    JOHNSON
50 Wyatt      MITCHELL
ENTER PAGE NAVIGATION COMMAND (F:first, L:last, N:next, P:previous, X:exit) : X
```