HW 3: Functions & Arrays - Income Tax Calculation

Write a program to perform a simple income tax calculation. It should prompt the user for data like income, expense, deductions, etc, and calculate the income tax for a given year.

Do not use STL container variables (vector, deque, etc) or variables of type string. Rather, use integer and character arrays and value returning and/or non-returning functions which are passed value and/or reference parameters. Furthermore, its structure must comply with the following guidelines:

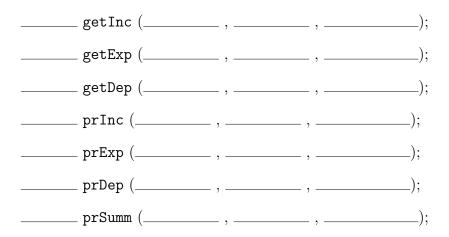
- 1. Use a header file for assignment and your personal information as usual
- 2. Use a separate header file, say, inctax.h, for declarations of functions (listed below) and include it in the file that contains your main() (hw03.cpp)
- 3. Perform I/O for tax payer name (taxPayer[]) and tax year (year[]) in main()
- 4. **Input** and processing (eg, calculate total, keep track of number of entries) for income items should be performed in function getInc(); output in function prInc()
- 5. Similarly, **input** and processing of expense items should be performed in function getExp(); output in function prExp()
- 6. Same scheme for dependents: perform **input** (name, relationship) in function getDep(); **output** in function prDep()
- 7. Finally, write a function, prSumm() to calculate and summarize the tax owed using the following formula:

$$tax = \{ [incTot - expTot - (depTot * 3000.00)] * 0.18 \}$$
 (1)

Use the following variables (in main()):

```
char expDesc[10][40];
                              // expense item description
                             // to hold number of expense items entered
int esiz;
                             // total expense for the year
double expTot;
char depNam[10][40];
                             // name of each dependent
                             // relationship of each dependent
char depRel[10][40];
                             // number of dependents entered if any
int dsiz;
Notice that incItem[]/incDesc[][], expItem[]/expDesc[][], and
depNam[][]/depRel[][] are pairs of parallel arrays. (Use them as such in your functions.)
isiz, esiz, and dsiz are the corresponding number of entries.
```

Declare the following functions, filling in for the formal parameter lists, in the header file inctax.h and define them in the function file inctax.cpp:



Run script and compile/interact with the program as usual (which implies you now also have hw03.scr). Package a tar file and submit it to canvas by the due date on top of this page.