

Project PP

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a) In this task, I output all the necessary data of the current element and then move to the next element using the pointer stored within it.

b) First, I save the publication year of the first book, and then I go through all the remaining books, comparing their publication years. If the years match, I increase a counter and add the price to the corresponding variable. If the current book's year is smaller (the book is older), I update the values of the previous variables and record the new "oldest book" entry.

c) I prompt the user to enter the name of an author, then iterate through all authors of every book. If an author matches the entered name, I save the book to the output file.

d) I create a dynamic array to store all publication years of the books. I first save the year of the first book. Then I iterate through each book and check its publication year. If the year is not yet in the array, I allocate memory and add it to the array. I sort the array using the built-in `qsort` method and then reverse it using a custom function I wrote. Next, I iterate through the array of years. For each year, I save all books published in that year to the output file.

e) I create a dynamic array of strings and save the first author into it. Then I iterate through each book, and if one of its authors is not yet in the array, I allocate memory and add them. In a separate loop, I go through each author stored in the array, and for each author, I check which books they have written.