

# C++ OOP – Exam Retake (19 September 2021)

Write C++ code for solving the tasks on the following pages.

Code should compile under the C++11 standard.

Submit your solutions here: <https://judge.softuni.org/Contests/3152/CPlusPlus-OOP-Regular-Exam-19-September-2021>

Only source code will be accepted as solution for each task.

## Task 1 – Virtual Book

It's 2001. The Kindle was not invented yet. You have this awesome idea of implementing a book that could be read from an electronic device! Watch out Steve Jobs, here I come!

Your task is to implement the missing functionalities.

General rules are:

- ✓ You are given the implementation of a **VirtualPage**. This page can contain **one or more rows** of data.
- ✓ Each VirtualPage also has an VirtualBook index (0, 1, 2 ....)
- ✓ You are given the raw data for the VirtualPages. It is your task to fill the up.

After the VirtualPages are populated – you are given several commands to process:

- ✓ **print\_all** – prints the content of all available pages of the VirtualBook (**if there is any**)
- ✓ **remove\_last** – removes the last page of the VirtualBook (**if there are any**)
- ✓ **remove\_all** removes all of the pages of the VirtualBook (**if there are any**)

## Input

The input is already parsed for you. Nothing additional should be done.

## Restrictions

Time limit: 250ms (0.25s)

Memory limit: 16 MB

## Examples

Input	Output
3 Hello C++ World end This is just a warm up	Printing all pages Page: 1 Hello C++ World  Page: 2 This is just a warm up

end Right? end 1 print_all	Page: 3 Right?
2 Hello C++ World This is just a warm up Right? end Testing testing... Read all about it end 3 print_all remove_last print_all	Printing all pages Page: 1 Hello C++ World This is just a warm up Right?  Page: 2 Testing testing... Read all about it  Removing last page Printing all pages Page: 1 Hello C++ World This is just a warm up Right?
2 C++ >> Java end What is love? Baby don't hurt me. Don't hurt me. No more. end 4 print_all remove_all print_all remove_last	Printing all pages Page: 1 C++ >> Java  Page: 2 What is love? Baby don't hurt me. Don't hurt me. No more.  Removing all pages Printing all pages Removing last page