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1 Flipbook

A flip book is a book with a series of pictures that vary gradually from one page to the next, so that when the pages are turned rapidly, the pictures appear to animate by simulating motion or some other change.

Design a language for describing flipbooks and implement a compiler for this language that can convert a flipbook description into a printable pdf (or a video).



We would like you to focus on the design of the language, for example - Is it easy to read? Can things be composed and abstracted?

1.1 Example

Let's consider a very minimal language **F**, which has only one primitive: display an image on a range of pages. In this language **F**, a flipbook can be defined as follows:

```
01 10 man.jpg // The image man.jpg from pages 1 to 10 11 20 cat.jpg // The image cat.jpg from pages 11 to 20
```

An accompanying compiler should be able to generate a viewable format from the flipbook definition. For example

```
fc man_cat.flip -o man_cat.pdf
```

where fc is a compiler of the above language