

Memory Bank Controllers

Is necessary?

Small games of not more than 32 KiB ROM do not require a MBC chip for ROM banking. The ROM is directly mapped to memory at \$0000-7FFF. Optionally up to 8 KiB of RAM could be connected at \$A000-BFFF, using a discrete logic decoder in place of a full MBC chip.

However our game requires more than 32KiB!

Retired from <https://gbdev.io/pandocs/MBCs.html>

Just a reminder that a kilobyte and a kibibyte are not the same.

The next available MBC for our game is MBC1.

We will implement a
simple "variant" of MBC1
because in our game we
only care about some very
specific data from the rom

```
pub struct MemoryBankController {  
    rom: Vec<u8>,  
    rombank: usize,  
    rombanks: usize,  
}  
  
impl MemoryBankController {  
    pub fn new(rom: Vec<u8>) → Self {  
        Self {  
            rom,  
            rombank: 1,  
            rombanks: 8,  
        }  
    }  
    pub fn readrom(&self, a: u16) → u8 { &0xFF }  
    pub fn writeroom(&mut self, a: u16, v: u8) {}  
}
```