Screen indexing - Low Level I/O

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Considerations:

1. We have, due to our hardware a max numbers of bits per word.
2. Thus, to know how many words will take to have all the rows with our max number of bits per word, we simply:

$$WpR = \frac{Width \cdot Height}{BpW \cdot Height}$$

Where: BpW = Bits per Word and WpR = Words per row

3. Then, if we exactly want to manipulate one exact bit, we do the following 3 steps:
   - $word = RAM[offset + WpR * row + col/BpW]$(to obtain the word location)
   - $word[col\%BpW]$ = (set the exact bit within the word to 1, with modulo operation)
   - Commit *word* to the data memory (RAM).

Hack Programming

1. Registers and memory: add, data and control operations, op codes A:0, C=1;
2. Branching: conditional statements. Labels between brackets
3. Variables: declaration with @, no labels.
4. Iteration: using jump operations.
5. Pointers:
6. Input/Output