

# Writing Scratch/BYOB code on paper

You might be asked to write Scratch/BYOB code on exams, so we've developed a technique for writing it on paper. There are a few key things to notice:

- We write variables in **UPPERCASE**.
- We change spaces between words in block names to dashes (this makes it much easier to read).
- Parentheses mark the start and end of a parameter list, and we separate consecutive parameters by commas
- We use indentation just as Scratch/BYOB does, to help us understand what is "inside" the **if**, **else**, and other Control structures.

Here's a sample (and a familiar piece of BYOB code):



...and here's how we would write it on an exam using our technique:

```
downup(WORD)
  if length-of(WORD) < 2
    report(WORD)
  else
    report(join-words(WORD, downup(all-but-first-letter-of(WORD)), WORD))
```

Here's how you could write the **factorial-of** block from lab.

```
factorial-of(NUM)
  if NUM = 1
    report(1)
  else
    report(NUM * factorial-of(NUM - 1))
```