Having fun with Scheme

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Schemat

- Scheme code formatter
- Written in Rust unfortunately...
- Uses the same `mfmt` formatter library as Pen.
- Rust allocator API + `bumpalo` crate

Schemat

Some features are not supported yet.

- Range comments
    - `#| This is a comment. |#`
- Multi-line strings

    ```
    "foo \
      bar"
    ```

    - Read flags 😭

Implementing Scheme in Rust

- VM is mostly done.
  - Written in Rust
  - The core logic is around 700 lines.
    - Mostly re-implementation of Ribbit
  - No-std and no-alloc
  - Can be used as a library.
  - Copy GC
- Bytecode compiler
  - Written in Scheme
  - Global variable get/set
- But write codes in Scheme as much as possible.

Next tasks...

- Scheme in Rust
    - More language features in the bytecode compiler
        - Closures
        - Slot variables
- Pen
    - `sort` and `reverse` functions
    - Syntax extension for list pattern matching
    - Compiler improvements

Summary

- Building a VM is fun (again.)