Graph 3-coloring in Forth
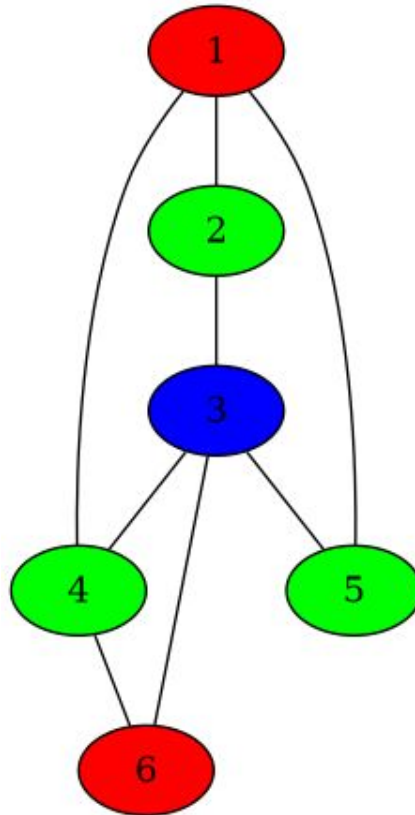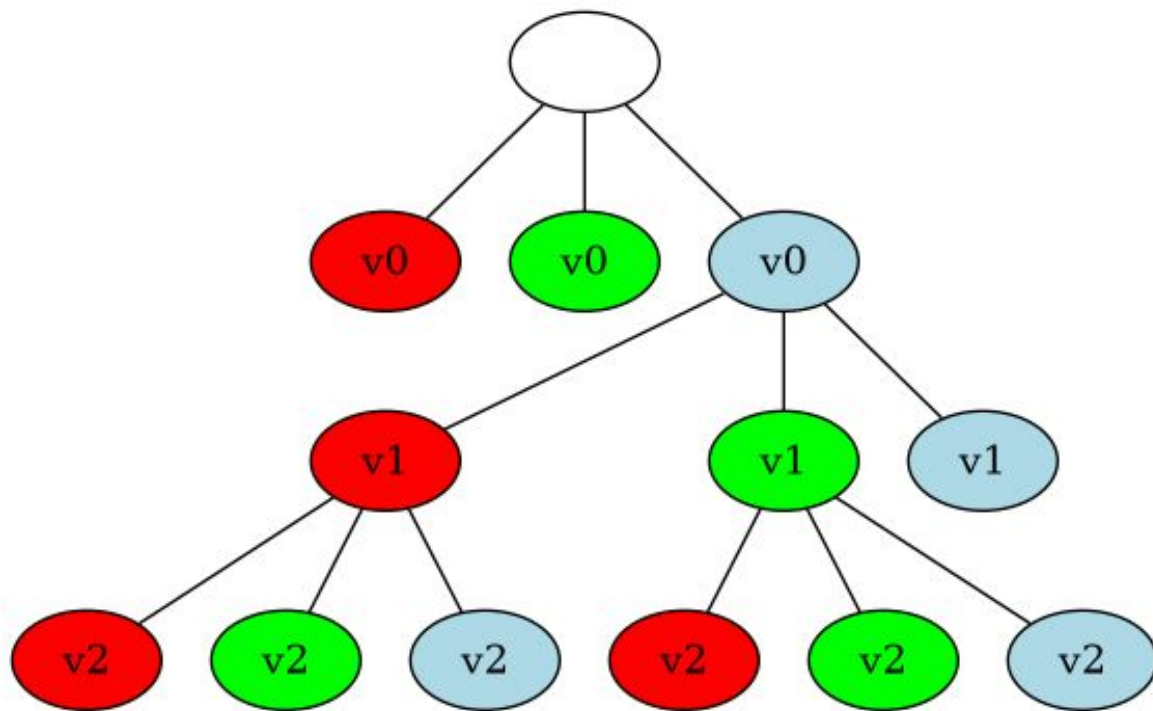
in Forth

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Graph Coloring

Backtracking

Forth-specific language features

- Using parsing words to read Dimacs files

```
: c postpone \ ;

: e parse-name s>number parse-name s>number ( ... ) ;
```

- Foreach neighbor macro

```
: foreach-neighbor ( node -- )
  ]] cells edges + $@ bounds +do [[
; immediate


: end-foreach ( -- )
  ]] cell +loop [[
; immediate
```

- Using with the Return Stack

Further work

- *Minimum Remaining Values* and *Maximum Degree* heuristics

- Binary Heap for the Priority Queue

- Testing