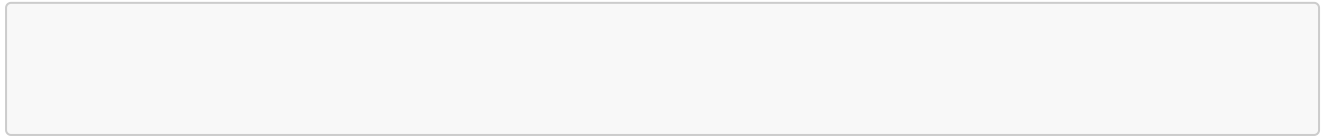


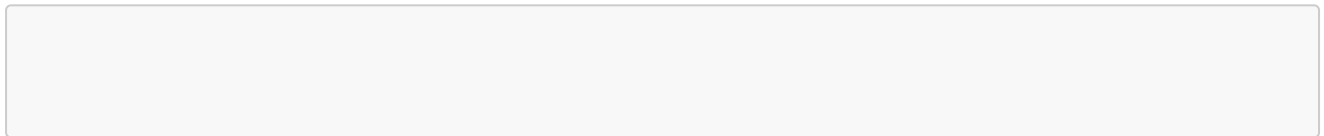
Syntax Highlighting:



To make coding in **SASM** more comfortable and developer-friendly, we've created a **custom VS Code theme** tailored specifically for the syntax of our language. This theme highlights key constructs, registers, operands, and labels, making it much easier to read and debug code at a glance.

🌟 Install the theme by using our [install script](#).

AST:



Understanding how your code is structured internally is crucial, That's why we built a visual AST (Abstract Syntax Tree) viewer, which displays the parsed structure of your program.

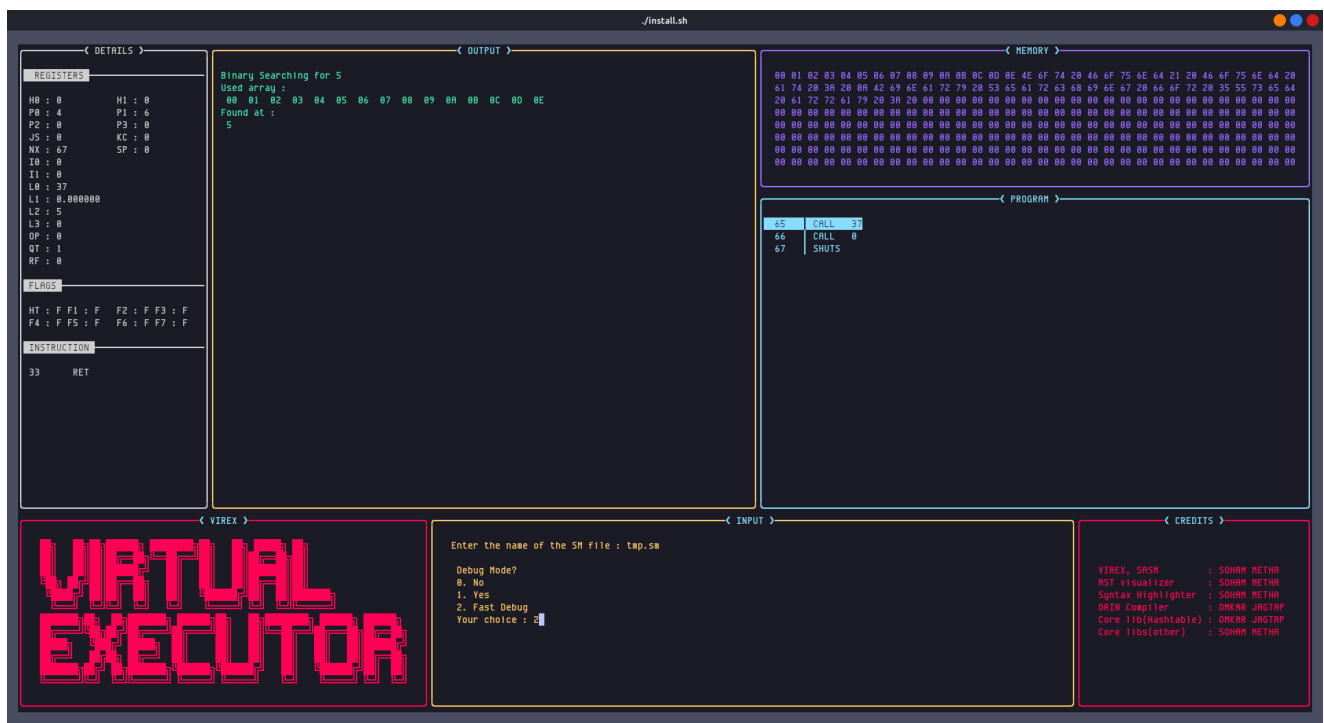
This tool helps visualize how the assembler understands your code, showing the hierarchical structure of scopes, statement ordering within blocks, and how constants and expressions are resolved.

!!! info "Local and Global Scopes"

- Every code block in the visualized AST represents a **scope**.
- **Block 0** is the **global scope**.

This makes it significantly easier to debug parsing errors, optimize macros, and understand the flow of control — even for larger programs.

GUI:



VIREX comes with a Command Line Interface(CLI) written in NCurses.

Under Development

-  A new programming language called **ORIN** is currently under development. It is being designed to compile directly to SASM.

If you're interested in compilers, language design, or virtual machines — **contributions are very welcome!**