

# REPL



A Shell is a command-line interpreter designed to interact with the operating system.

A REPL is a model of interaction, implemented by many shells.

REPL (Read, Eval, Print, Loop) is an interactive programming environment that:

1. Reads user input
2. Evaluates it
3. Prints the result
4. Loops back to wait for more input

REPLs are common in:

- Scripting languages: Python, Ruby, Node.js, Bash
- Lisp-based languages: Scheme, Common Lisp
- Dev tools: debug consoles, math shells, and interpreters
- Interactive shells
  - Read with "getline()"
  - Evaluate with "strcmp()"
  - Print with "printf()"
  - Loop with a control structure