

# rlox: Lox Interpreter / REPL in Rust

 Rust Build & Test **passing**

该项目属于小组：金文泽（单人）。项目代码目前在 [GitHub](#) 中可查看。以下是项目目前的 README，项目没有借助任何前端工具，手写实现了词法分析、语法分析、语义分析（变量解析以正确实现闭包）、过程式编程、多个内置函数。目前，正在实现 Lox 的面向对象，即将完成项目。本项目除了能够执行单文件代码外，还拥有 REPL。

## Note

This repository is a work in progress and may not be fully functional yet.

`rlox` is a Rust implementation of the Lox programming language, as described in the book [Crafting Interpreters](#). It includes a REPL (Read-Eval-Print Loop) and the ability to execute Lox scripts.

## Features

- A fully functional Lox interpreter written in Rust.
- Support for both interactive REPL and script execution.
- Implements the Lox language as described in *Crafting Interpreters*.
- Easy to build, run, and test using `cargo`.
- Well tested with unit tests and integration tests.

## Usage

### Running the REPL

To start the interactive REPL:

```
1 | ./rlox
```

### Running a Lox Script

To execute a Lox script:

```
1 | ./rlox <script>
```

## Installation

1. Clone the repository:

```
1 | git clone https://github.com/WenzeJin/rlox.git
2 | cd rlox
```

2. Build the project:

```
1 | cargo build --release
```

3. Run the REPL or a script as described in the [Usage](#) section.

## How to Build & Run

---

To build the project in release mode:

```
1 | cargo build --release
```

To build and run the project:

```
1 | cargo run
```

## How to Test

---

Run the test suite using `cargo`:

```
1 | cargo test
```

## Contributing

---

Contributions are welcome! If you'd like to contribute:

1. Fork the repository.
2. Create a new branch for your feature or bugfix.
3. Submit a pull request with a clear description of your changes.

## License

---

This project is licensed under the MIT License. See the [LICENSE](#) file for details.

 **Note**

Copyright (c) 2025 [Wenze Jin](#)