

## Open Iterators Project

The project/directory for this section is called iterators.

To open the Cargo project in VSCode, go to File > Open Folder.... Locate and select the iterators directory in the learn-to-code-with-rust course folder.

Alternatively, navigate to the project directory in Terminal/PowerShell and execute code .

Write your code in the src/main.rs.

### Topics Covered in this Section

- Iterators
- Manual Iteration
- Iterator Exhaustion
- The Iterator Trait
- The IntoIterator Trait
- The FromIterator Trait
- The for loop
- The iter, into\_iter, and iter\_mut Methods
- Iteration over Various Types
- The map Method
- The collect Method
- The filter and find Methods
- The filter\_map and flat\_map Methods
- The enumerate Method
- The partition Method
- The zip Method
- The any and all Methods
- The fold and reduce methods
- The sort and sort\_by\_key Methods

- The rev Method
- The cloned Method
- Math Methods like sum, product, max, min, and count
- The lines Methods
- The last, nth, and position Methods
- The take, skip, and step\_by Methods
- Collecting Command Line Arguments
- Reading Directory of Files