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Ownership in Rust

Rust Language Book

The system of ownership is how Rust can make memory safety guarantees without needing run-time processes like garbage collection. It achieves this by applying a set of rules:

- each value in Rust has an *owner*
- there can only be **one** owner at a time
- when the owner goes out of scope, the value will be dropped and the memory is freed

```
                                                // s is not valid here
{
        let s = "hello";    // s is valid from this point on

        // do stuff with s
}                       // this scope is over, s
                                                // isn't valid any more
```

Values can be have temporary ownership by Borrowing in Rust.

References

Rust Book - Chapter 4