

# Democritus Language Reference Manual

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February 26, 2016

# Contents

1	Introduction
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2
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# Chapter 1

## Introduction

Democritus is a programming language with a static type system and native support for concurrent programming via its `atomic` keyword, with facilities for both imperative and functional programming. Democritus is compiled to the LLVM (Low Level Virtual Machine) intermediate form, which can then be optimized to machine-specific assembly code. Democritus' syntax draws inspiration from contemporary languages, aspiring to emulate Go and Python in terms of focusing on excelling in use cases familiar to the modern software engineer<sup>1</sup> as well as emphasizing readability and having “one – and preferably only one – obvious way to do it”<sup>2</sup>.

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<sup>1</sup><https://golang.org/doc/faq#Origins>

<sup>2</sup><http://c2.com/cgi/wiki?PythonPhilosophy>