

# Basic C Compiler Developers Guide

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## 1 Introduction

This document provides information on my C compiler. We only implement a subset of the language which will be defined as the document is developed.

## 2 Building

To build both the documentation and compiler use the Makefile provided in the `compiler/` directory and run:

```
make
```

To build just the documentation run:

```
make developers
```

To build just the compiler run:

```
make mycc
```

To clean all output files run:

```
make clean
```

## 3 Usage

Usage: `mycc -mode [-o outfile] [-h] infile`

<code>mode</code>	integer from 0-5 specifying mode to run
<code>outfile</code>	file to write output to instead of stdout
<code>infile</code>	file to read input from

## 4 Modes

In this section we describe the features of the various modes the compiler can be run in.

### 4.1 Mode 0

#### 4.1.1 Features

- Usage and version information can be printed
- Output can be printed to a specified file

#### 4.1.2 Implementation Details

We use `getopt` to parse input arguments. If no mode is specified, the program prints usage information and exits. If mode 0 is specified, the program prints version information. Otherwise the program prints nothing if any other mode is specified.

When run in this mode we ignore the input file; whether one is specified or not.