# **ALPHAX Compiler**

Manual

# **Development by ALPHAX**

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#### **Objective**

The purpose of this document is to show the user how the Algol compiler works.

#### Introduction

The following written represents a manual for the use of the Algol Compiler. We show the installation requirements, the steps to follow for the installation, and the commands required to run and test the Algol Compiler.

#### **Members**

- Flores Constantino Diego.
- Rojas Castañeda Karen Arleth.

#### **User manual**

#### Installation prerequisites

- 1. You need to have a current version of elixir (1.11.2) on your computer If you don't have it, you can download it <a href="here">here</a>.
- 2. The complete project is in a Github repository, so, to download it you need to have an account. https://github.com/
- 3. Have Git installed.
  You can download it at the following link. https://git-scm.com/downloads
- 4. Have a window operating system.

#### Installation

The complete compiler program can be found on page <a href="https://github.com/rojaspixel07/Alphax.git">https://github.com/rojaspixel07/Alphax.git</a>. Once inside the page, it is necessary to click the download button and copy the URL that appears within the following box.

The next step is to clone the repository in some folder on our computer, in this case, we did it on the desktop and for this, and the following command is typed in the terminal:

- git clone <a href="https://github.com/rojaspixel07/Alphax.git">https://github.com/rojaspixel07/Alphax.git</a>

The next step is to change to the **Alphax** folder by typing:

- \$ cd alphax

The folder where the execution and subsequent tests can be done is alphax\_compiler

With \$1s we can look for it.

We are in it typing:

- \$ cd alphax\_compiler

```
Arlethedeskior-kribmls MINGW64 ~/desktop

Arlethedeskior kribmls MINGW64 /desktop/alphax

Is alphax_compiler/ alphax_documentation/

Arlethedeskior-kribmls MINGW64 ~/desktop/alphax

cd alphax_compiler
```

This is to get into the Alpha code folder

Type the following command to generate an executable:

- \$mix escript.build

```
ArletheDESKTOP-KRHSMU 5 MINGW64 ~/desktop/alphax/alphax_compiler

$ mix escript.build

compiling 1 file ( cx)

Generated escript alphax with MIX_ENV=dev
```

#### Execution

./Alphax <input parameters>

#### **INPUT PARAMETERS**

-c <file_name.c></file_name.c>	Compile program (check the same folder for [file name].exe).
-t <file_name.c></file_name.c>	Show token list
-a <file_name.c></file_name.c>	Show AST
-s <file_name.c></file_name.c>	Show assembler code
-o <file_name.c></file_name.c>	[newName]   Compile the program with a new name.

#### Test

To run all the tests of the project you only need to type the following command:

- \$ mix test

