# User Manual

## Build

To build the project, you need to have the GNAT compiler installed on your system. You can install it by running the following command:

```
sudo apt-get update -q && sudo apt-get install -y gnat
```

Create a build directory where you will build the source files:

```
mkdir build && cd build
```

Then, you can build all the source files by running the following command:

```
gnatmake -gnatwa -gnat2022 -gnata -g ../src/*.adb
```

## Docker

If you have some issues with the GNAT compiler, you can easily build the project and run the interpreter using Docker. To do so, you need to have Docker installed on your system.

To build the project using Docker, run the following command at the root of the project:

```
sudo docker build -t in7preter . && sudo docker run -v .:/in7erpreter -it --rm in7preter
```

It will build the project and open a shell in the container. You can then run the interpreter as described in the next section.

Once you are done, you can exit the container by typing `exit`. All the files created in the container will still be available on your system since we have mounted the current directory in the container.

## Run

To run the interpreter go into the build directory and run the following command:

```
./main <path_to_intermediate_code_file> [-d]
```

- `<path_to_intermediate_code_file>` is the path to the intermediate code file you want to execute.
- `-d` is an optional argument that enables the debug mode. In this mode, the interpreter will print the state of the memory at each step of the execution.

## Examples

Some examples of intermediate code files are available in the `examples` directory.

```
./main ../examples/factorial.ic -d
```