

Trivial Language for Z80

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1 Introduction

This document will give a brief overview of how the *Trivial Language for Z80* works and how to actually program in it. program in it.

2 Reserve Words and Keywords

There are several reserve words within the language. They are as follows:

2.1 Reserve Words

The folling list is to demonstrate which words can not be used in the language other than their intended purpose.

1. `main()`
2. `send_int(ADDRESS, int)`
3. `send_char(ADDRESS,char)`
4. `send_int_array(ADDRESS, int[], size)`
5. `send_char_array(ADDRESS, char[], size)`
6. `read_int(ADDRESS, int)`
7. `read_char(ADDRESS, char)`
8. `read_int_array(ADDRESS, int[], size)`

9. `read_char_array(ADDRESS, char[], size)`
10. `for`
11. `while`
12. `return`
13. `function`

2.2 Data Types

The following are data types that exist in the language. These can not be overridden or expanded.

1. `int`
2. `char`
3. `float`
4. `array` \rightarrow `char[constant]`

2.3 Keywords

The following are data types that deal with interacting with the data bus.

1. `ADDRESS`
2. `WRITE`
3. `READ`

2.4 Comments

Our language has only one way to enter comments and that is in C-style (`/*
comment */`)

3 Syntax

In this language, we have certain rules on how to have things up and running.

For example, there can only be one statement per line – with some exceptions. Blank lines are ignored. The assembly will put comments at the start of a block, so:

`int x = 0 /* set a variable */` will turn into:

```
x defb 0 ; set a variable
```

4 Sample Programs

```
main()
{
char type[11]
type = "hello world"
send_char_array(0xFF00, type, size)
}
```