# Software Engineering Project

## - Bug World Assembler Manual -

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#### **NAME**

asm -- assembler for sim bugs

### **SYNOPSIS**

asm [options] [file.buggy]

## **DESCRIPTION**

**asm** reads the assembler code from *file.buggy*, translates it into bug code for the **sim** simulator and emits it on stdout. If no file is given on the command line, **asm** reads from stdin.

#### **OPTIONS**

-h, --help

Emit a short help message on stdout and exit. It is an error to specify any other option or file name together with -h.

#### **FILES**

**asm** does not depend on any files except those specified on the command line. The exact formats for the files *file.buggy* and the output files are specified elsewhere, but here is an example for the input language:

```
;
; stupid.buggy
;

search:
    sense ahead food else walk
    move else search
    pickup else search
    goto home

walk:
    flip 3 else searchright
    turn left
    goto search

searchright:
    flip 2 else searchstraight
```

```
turn right
    goto search
searchstraight:
   move else walk
    goto search
home:
   sense ahead home else walkhome
   move else home
    drop
    goto search
walkhome:
    flip 3 else walkhomeright
    turn left
    goto home
walkhomeright:
    flip 2 else walkhomestraight
    turn right
    goto home
walkhomestraight:
   move else walkhome
    goto home
```

## **EXIT CODE**

Upon successful completion, **asm** exits with exit code 0, and a positive exit code otherwise.