Build Your Own Lisp

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Write an abstract

Contents

Prompt

1a ⟨*Print version and exit information.* 1a⟩≡

```
puts("Lispy v0.0.1");
puts("Press ctrl-c to exit\n");
```

This code is used in chunk 2b.

Declare a buffer for user input of size 2048.

1b ⟨*Declare a buffer for user input.* 1b⟩≡

```
#define INPUT_SIZE 2048

static char input[INPUT_SIZE];
```

Defines:
`input`, used in chunks 1d and 2a.
This code is used in chunk 1c.

1c ⟨*prompt.c* 1c⟩≡

```
⟨Include the standard I/O functions. 2c⟩

⟨Declare a buffer for user input. 1b⟩
```

This definition is continued in chunks 1 and 2.
Root chunk (not used in this document).

Given a `prompt` string, `read` user input.

1d ⟨*prompt.c* 1c⟩+≡

```
char *read(const char *prompt)
{
  fputs(prompt, stdout);
  return fgets(input, INPUT_SIZE, stdin);
}
```

Defines:
`read`, used in chunks 1d and 2b.
Uses `input` 1b.

2a ⟨*prompt.c* 1c⟩+≡

```
void eval()
{
  printf("< %s", input);
}
```

Uses `input` 1b.

2b ⟨*prompt.c* 1c⟩+≡

```
int main(int argc, char *argv[])
{
  ⟨Print version and exit information. 1a⟩

  while (read("> ") ≠ NULL) {
    eval();
  }


  return 0;
}
```

Uses `read` 1d.

Common Headers

2c ⟨*Include the standard I/O functions.* 2c⟩≡

```
#include <stdio.h>
```

This code is used in chunk 1c.

Chunks

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Todo list