Programming the 8051

Assembly Language Programming

Topics

- Lines of Code
- 8051 Instruction Syntax
 - Labels
 - Instruction
 - Comments

Lines of code

```
org 0000h ; start code at 0000h

loop: ; a label to jump to

...

sjmp loop ; jump back to beginning end ; end the program
```

Lines of Code

Alphanumeric characters - Carriage Return - Text Editor - ASCII

Lines of Code

Instruction to the CPU and/or

Directive to the assembler

Lines of Code

Statement or

Line of code or

Instruction

8051 Instruction Syntax

label: instruction ;comment(s)

HERE: SJMP HERE ; loop until interrupt

Labels

fred2:

tabletwo:

receive:

8051 Instruction

Instr. Parts 1 2 3

mov dest, source

(mnemonic) (operands)

Comments

```
;this is a comment; any reserved words;mov a, b
```