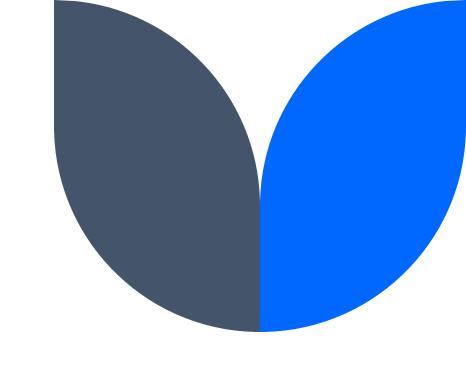
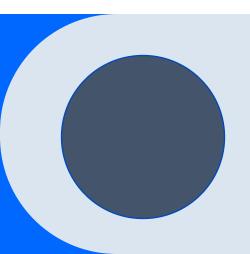
MIPS ASSEMBLER

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Code

```
; test.asm
ldc 0
ldc -5
ldc +5
jal label
label:
label: ; duplicate label definition
br nonesuch; no such label
ldc var1 ; forward ref
var1: ldc 25; a variable
```



; test.asm ----> comment(entire line)

Idc var1 ; forward ref

Idc 0

Idc -5

Idc +5

jal label//error as jal is not a valid mnemonic for this system

label:

label: ; duplicate label definition

br nonesuch; no such label

var1: ldc <mark>25</mark>; a variable

SYMBOL	ADDRES
<mark>var1</mark>	6
label	5
label:	5(error)
nonesuch	-(error no address defined)

LITERAL	ADDRES
O	7
<mark>-5</mark>	8
+5 25	9
<mark>25</mark>	10

Analysis (Pass 2)

Now to check the working of pass 2 of the assembler we take the above code after removing the error and reconstruct the symbol table.

SYMBOL	ADDRES
<mark>var1</mark>	4
label	1

LITERAL	ADDRES
0	4
-5	5
+5	6



ADDRESS(from symbol table) OP code

Value = 0

1111111111111111111111111101100000000 Idc -5

value = -5 OP

Value = +5

.0000000000000000001100100000000 Idc 25

Value = 25

Thank you

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