



ASSEMBLER USER MANUAL

Notes and Limitations

- Max size of the input program is 100 line.
- Supported instructions are:

R-type	Add, And, Or, Nor, Sll, Slt, Jr.
I-type	Andi, Ori, Lw, Sw, Beq.
J-type	J, Jal

- Do not input any of the following symbols: (. , :)

Program input

- 1 .txt file with the assembly code written as follows:
 - Every instruction is in 1 separate line
 - The instructions should follow the following format exactly

Add	add rd rt rs
And	and rd rt rs
Or	or rd rt rs
Nor	nor rd rt rs
Sll	sll rd rt rs
Slt	slt rd rt rs
Jr	jr rs
Andi	andi rt rs immediate_const
Ori	ori rt rs immediate_const
Lw	lw rt immediate_const (rs)
Sw	sw rt immediate_const (rs)
Beq	beq rt rs label
J	j label
Jal	jal label

- To insert a label before an instruction; separate with a space only (ie. "Exit add \$s0 \$s1 \$s2").
- Program is case and space; please follow the guide above exactly.

Program output

- A .txt file containing the machine code
- A .txt file containing a list of all labels in the input program and their equivalent addresses (an indicator of correct operation)
- A .txt file containing the assembly instruction but without the labels(an indicator of correct operation)

Directions for use

1. Put the .txt file containing the assembly code in the same directory as the program
2. Run the program and input the file name "including extension" (ie. "test_program.txt")
3. The output files will be created in the same directory.