

CSE331-COMPUTER ORGANIZATION HOMEWORK 1

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Pseudocodes or Some Register Information

- 1) User can be write max 20 character for file name example : input_hw1.txt
- 2) All digit word are allocated in memory example : one two etc. and One Two etc.
- 3) `li $s3, '0'` that instruction in order to enter file name by user .
Then , label of fileNameFix and fileNameEnd change '\n' of end of user's input(file name).
- 4) `move $a2, $a0` . I just want to change '\n' through register `a2`.
- 5) `addi $t2, $t2, 1` . `$t2` register says , this character is begin of sentence or not (if it is 1 begin or zero is not).
- 6) **main** : main function is started
- 7) **returnKeepLabel**: I'm keeping return adress for main function when I finish all process
- 8) **fileNameFix** : searching '\n' in end of filename
- 9) **fileNameEnd**: Im putting '\0' character to end of file name instead of '\n'
- 10) **readFile**: Open the file and reading their context.
- 11) **Loop**: All context are controllent though this label.
- 12) **Continue**: that controls what character is digit or not.
- 13) **print**: If character is not a digit , printing is here.
- 14) **printNewLineAndPoint**: If current character is new line or point these are printing is here.
- 15) **IncrementControl**: Indent and Point Increment for Capital Letter Digit
- 16) **zeroLabel ...etc** : printing letter of digit .
- 17) **close** : closing the our file.

Algorithm

- 1) Users enter a file name then this input is parsed in order to change end of input for putting '\0'
- 2) Entered file name is opened , read and putting first address to \$a1 register.
- 3) I'm getting a byte each character by "lb" instruction
- 4) I want to know previous and next character for typing digit with word.
- 5) I say that \$t2 his character is begin of sentence or not (if it is 1 begin or zero is not.) If taken character is digit and \$t2 is 1 . "One" or "Two" etc. will be typed. If \$t2 is 0 . "one" or "two" etc. typed.
- 6) But , I need to check next , previous and two previous character for floating number or bigger digit .
lb \$t5,0(\$a1) #Current Character
lb \$t7,-1(\$a1) #Previous Character
lb \$s4,1(\$a1) #Next Character
lb \$t8,-2(\$a1) #Two Previous Character
- 7) When I read and print all character in file . Main function is got back . It means , procedure is finished and back.

NEW FEATURE IN PROGRAM

- 1) User can type file name

Enter Your File Name (Example : input_hw1.txt) : **input_hw1.txt**

- 2) User can do intent his/her file

(Example :

-File Content-

There are 3 apples, 12 oranges in the kitchen.
7 eggs also. TL 2.45 remaining money.

- Printing Content -

There are three apples, 12 oranges in kitchen.
Seven eggs also . TL 2.45 remaning money.