



## CSE 331 Computer Organization

### Project 1 – MIPS Assembly

**Due date: October 26, Friday 17:00 (Moodle)**

Write an assembly program that traverses a given text file and changes any numbers below ten to text instead of digits. Be careful to initialize with capital letter if it is the beginning of the sentence. Print out the resultant text on console.

In order to read a file you have to use **syscall** code 13 to open file and code 14 to read file. Details can be found here:

<http://courses.missouristate.edu/kenvollmar/mars/help/syscallhelp.html>

Please be careful that you have to shift all characters after the digit to have required space to put the textual representation of the digit.

For instance:

Input text:

I am 7 years old.

Output text:

I am seven years old.

Assume the total size of even the shifted text is less than 256 Bytes.

#### Rules:

1. All project details will be announced at next PS (October 16). So attend the PS for your own good!
2. Assembly that cannot be executed can at most get 20pts.
3. You have to use MARS MIPS simulator tool of Missouri State University:  
<http://courses.missouristate.edu/kenvollmar/mars/>
4. No late submissions even if 1 minute.

*Honor code:* It is not a group project. Do not take any code from Internet. Any cheating means at least -100 for both sides. Do not share your codes and design to any one in any circumstance. Be honest and uncorrupt not to win but because it is RIGHT!