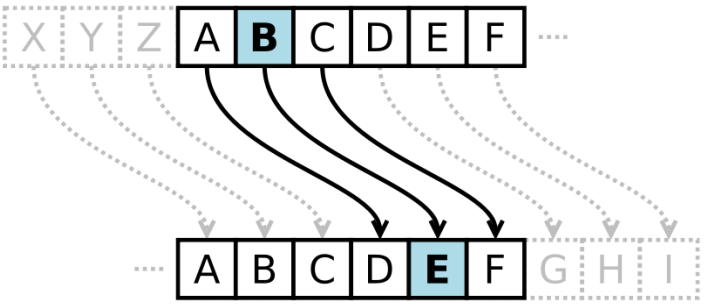
Computer Organization Project 1 – MIPS Assembly 1

Due: 23:55, Mar. 18, 2019

In this start-up project, you are required to get familiar with both MARS (**M**IPS **A**ssembler and **R**untime **S**imulator) programming environment and basic MIPS (**M**icroprocessor without **I**nterlocked **P**ipeline **S**tages) instructions. Please write a program to perform Caesar's cipher (shift cipher). Both the input plain-text and the output cipher-text are in UPPER-CASE (maximum string length is 20 with space). The transformation can be represented by aligning two alphabets; the cipher alphabet is the plain alphabet rotated left by some number of positions. Following is an example with shift parameter = 3 ($0 \leq$ shift parameter ≤ 26).



Please submit your source code according to the following rules:

1- Write down enough comments such that you would receive higher scores.

2- The filename is your student ID (e.g., B12345678.asm).

```
Example:

Please input the plain-text:
ABCDE
Please input the shift parameter:
3
The cipher-text is: DEFGH

Please input the plain-text:
JAMES LIU
Please input the shift parameter:
23
The cipher-text is: GXJBP IFR
```