

## REPORT – 151044085 EMRE KAVAK – HW1

### .data

Set digit labels to string equivalent ( lower and upper ) ( for example one = “one” )

Set fileName to "input\_hw1.txt"

Set fileSpace to 256

### .text

Load immediate register \$v0 assign to 13 # for open file

Load address \$a0 to fileName # load read file adress

Load immediate \$a1 to 0 # read mode

System call

Move from \$v0 the open file address into \$s0

Set the register \$v0 with 14 # read file system call code

Move \$s0 into \$a0 for keep adress

Load address fileSpace into \$a1 for use read byte to byte char

Load immediate \$t0 with 0 for do check first latter in sentence

Load immediate \$t4 with 0 for print upper-case latters

System call

### loop:

if branch equal to zero jump to **Exit**

Set to \$v0 11 for print char

Load byte first \$a1 adress into \$a0

Increase 1 \$t0

Set to \$t4 with 0

Check \$a0 for equal digits;

If they digits, jump **checkAfter** label;

    if \$a1+1 adress is digit;

        Jump to **addOne** label;

**AddOne** will increase 1 \$a1 and jump to loop

    if \$a1+1 equal '.';

        Jump to **checkAfterPoint**;

        if \$a1+2 equal zero ;

            Jump to **checkBefore** Label;

                Check \$a1 -1 adress and jumps labels

If equal space ' ';

Jump to **checkSentenceEnd**;

Check if \$a1-2 is equal '.';

Jump **afterSpacePrint**;

Increase 1 \$t4, jump **allPrint**

Else jump **allPrint** label:

Jump to labels according to digits

If \$t1 > 1, jump to **checkBefore** label;

Check \$a1 -1 adress and jumps labels

Else jump to **allPrint** label:

Jump to labels according to digits

If they aren't digit;

jal **procedure**;

Increase 1 \$a1

jr \$ra

System call

Jump **loop**

**Exit:** Set to register \$v0 with 10 (syscall exit code)

Move \$s0 into \$a0 for close file description