

CS240
Laboratory 12 Assignment

Due: Wednesday, before lab

The following data section defines a table of names. Each name is a string of ascii characters which represent the letters in the name, and may be thought of as an array of characters.

Notice that the names are of variable length, and that all are terminated with a 0 (which is the ascii value for a NULL character), as specified by the `.asciiz` directive.

```
        .data

names:  .asciiz "jennifer"
        .asciiz "jean"
        .asciiz "stella"
        .asciiz "sohie"
        .asciiz "ellen"
        .asciiz "rita"
```

Write a procedure **getname** which takes a parameter **index** as an input, and returns two values: the starting address of the corresponding name, and its length. You will need to declare variables **word** and **length** in your data declaration section.

You should use the register `$a0 - $a3` and `$v0 - $v1` to pass the parameters and to return values, as intended in MIPS (in other words, your procedure should not reference your variables directly; you should pass these in and out of the procedure using the registers).

In the main program, prompt the user for an index, call the **getname** method, and when it returns, output the indexed name and the length of the name. For example, if the index input is 3, the output will be:

sohie 5

Print a hardcopy of the console window and your source file. You should also save a copy – this procedure will serve as the basis for your Hangman game.