**Assignment Description**

Create the following macros in the java\_util-hw.asm file:

* **printArray(%array, %length, %datasize)** – This macro will print out the values (integers) stored if an array of any given length

* **findHighLow(%array, %length, %datasize)** – This macro will find the highest and lowest values in the array.
* + $v0 should return the highest value in the array.
  + $v1 should return the lowest value in the array.
  + NOTE: DON'T PRINT ANYTHING INSIDE OF THIS MACRO. Just let it "silently" return it's answers via "$v0" and "$v1" any printing will be done in the calling program.

**Descriptions of Parameters**

%array – This  parameter is the array itself

%length – This is the number of elements in the array

%datasize – This is either BYTE=1, HALF=2 or WORD=4

**Test case and Sample Run**

Test your macros in the context of the “array-basics-hw.asm” file. For example try adding the following statements to the end of the program:

System\_out\_print\_str(“The following are the values of the array: \n”)

printArray(array,5,WORD)

findHighLow(array,5,WORD)

move $s0, $v0

move $s1, $v1

System\_out\_print\_str(“\nThe largest value in the array is: ”)

System\_out\_print\_reg($s0)

System\_out\_print\_str(“\nThe smallest value in the array is: ”)

System\_out\_print\_reg($s1)

HINTS: Don't "reinvent the wheel" take advantage of the existing macros