CSE 2312: Computer Organization &

Assembly Language Programming

Fall 2017

Program #2

In this assignment, you will implement basic search operations on an array populated with 10 random values. When the program is executed, it should immediately print output in the following format:

a[0] = <RANDOM 0>

a[1] = <RANDOM 1>

a[2] = <RANDOM 2>

a[3] = <RANDOM 3>

a[4] = <RANDOM 4>

a[5] = <RANDOM 5>

a[6] = <RANDOM 6>

a[7] = <RANDOM 7>

a[8] = <RANDOM 8>

a[9] = <RANDOM 9>

MINIMUM VALUE = <RANDOM X>

MAXIMUM VALUE = <RANDOM Y>

Where <RANDOM> represents a positive unsigned numeric value in the range [0-999]. After the array contents are generated and printed, your program will search the unsorted random array to find the minimum and maximum values, which will then printed as shown above.

An example of proper execution is provided below for reference…

a[0] = 5

a[1] = 120

a[2] = 3

a[3] = 555

a[4] = 875

a[5] = 20

a[6] = 163

a[7] = 23

a[8] = 14

a[9] = 501

MINIMUM VALUE = 3

MAXIMUM VALUE = 875

Points will be assigned as follows:

1. Array contents randomly generated and printed, numbers change between program runs

(40 points)

2. Minimum value calculated and printed correctly

(30 points)

3. Maximum value calculated and printed correctly

(30 points)

Submit your solution as a single “.s” file to Blackboard. Name the file “abc1234\_p2.s”, where abc1234 is your UTA NetID.

\*\*\* Be sure to check http://github.com/cmcmurrough/cse2312 for useful code snippets \*\*\*