**CSI 403 – Spring 2018 – Project #3 – Hash Collisions**

Goal:

* Write an HTTP service which accepts an array of strings and returns the sets of strings which collide in the hash table in the order they appeared in the input list.

Problem:

* Receive as input an array of strings.
* Return the set of strings which collide in the hash table in the order they appear in the input list.
* The hash algorithm should be implemented as the sum of the ASCII values of the lower-cased letters. For example, “Bob”, “bob”, and “obb” all hash to the same number.
* Example input:

{ "inList" : [ "Bob", "boj", "obb", "job", "BOB", "foo" ] }

Example output:

{"outList": [ [ "Bob", "obb", "BOB" ] , [ "boj", "job" ] ] }

* Do not output strings which do not collide, such as “foo” in the example above. If the table has no collisions, return the empty array. { "outList" : [ ] }
* Erroneous input (e.g. malformed JSON) should be handled gracefully with appropriate error messages.

Deliverables:

Submit to the Blackboard by the due date:

* An HTTP URL to a RESTful service which must remain up and running 24/7 until grading is complete. Graders will invoke your service with a tool such as curl or Postman at a time of their choosing.
* A ZIP file containing your source code, written in any language you choose.