**Sample Execution Log**

* #usage message
* Missing :// + http:/zdu.io/a.html - { code: 'URL\_SYNTAX', message: 'URL\_SYNTAX: bad url http:/zdu.io/a.html' }
* Missing domain + http:///a.htmp - { code: 'URL\_SYNTAX', message: 'URL\_SYNTAX: bad url http:///a.htmp' }
* Successfully adding + http://zdu.io/a.html - { value: 'http://cs544.io/3or718' }
* Idempotent + http://zdu.io/a.html - { value: 'http://cs544.io/3or718' }
* Not SHORTENER\_DOMAIN url ? http://zdu.io/a.html - { code: 'DOMAIN', message: 'DOMAIN: domain of url http://zdu.io/a.html not equal to cs544.io' }
* Successful lookup ? http://cs544.io/3or718 - { value: 'http://zdu.io/a.html' }
* Case ignored in scheme and domain ? htTPS://cs544.IO/3or718 - { value: 'https://zdu.io/a.html' }
* Number of successful lookups # http://zdu.io/a.html - { value: 2 }
* Never returned this url ? htTPS://cs544.IO/3or718x - { code: 'NOT\_FOUND', message: 'NOT\_FOUND: htTPS://cs544.IO/3or718x not found' }
* Deactivate - http://zdu.io/a.html - {}
* Cannot be looked up ? htTPS://cs544.IO/3or718 - { code: 'NOT\_FOUND', message: 'NOT\_FOUND: htTPS://cs544.IO/3or718 not found' }
* Add it back in, same short url + http://zdu.io/a.html - { value: 'http://cs544.io/3or718' }
* Look it up again successfully ? htTPS://cs544.IO/3or718 - { value: 'https://zdu.io/a.html' }
* Count updated # http://zdu.io/a.html - { value: 3 }