**﻿#NAME: NIRZARI IYER**

**#ASSIGNMENT 4**

**#ID NO: 1001117633**

**#BATCH TIME: 6:00 to 8:00**

A) **READ ME and Explanation of code:**

 -Execute the Programming assignment 4 by executing python file main.py

 -Result will be displayed with memcache and without memcache. Result is also limited by number of tuples (200-800 tuples)  (Screenshot)

B) **Results:**

Result 1:

Time taken to download file: 2.18187379837sec

Time taken to upload file: 2.40435810089sec

Time taken to insert data is: 58.5406868458sec

Time taken to execute 1000 query is:

Without memcache: 19.7781970501

With memcache: 14.9860200882

Time taken to execute 5000 query is:

Without memcache: 6.73937010765

With memcache: 14.9860200882

Time taken to execute 20000 query is:

With memcache: 223.176892996

Without memcache: 221.472379923

Queries for tuples in range of 200-800:

Time taken to execute 1000 query is:

Without memcache: 19.6064789295

With memcache: 15.1317760944

Time taken to execute 5000 query is:

Without memcache: 101.073457003

With memcache: 90.1007649899

Time taken to execute 20000 query is:

With memcache: 223.503216028

Without memcache: 221.549136162

Result 2:

Time taken to download file: 2.18187379837sec

Time taken to upload file: 3.40435810089sec

Time taken to insert data is: 57.5406868458sec

Time taken to execute 1000 query is:

Without memcache: 19.4610155491

With memcache: 11.7191416004

Time taken to execute 5000 query is:

Without memcache: 6.4448901781

With memcache: 12.6350987302

Time taken to execute 20000 query is:

With memcache: 223.[6064576234](tel:6064576234)

Without memcache: 221.[9806751205](tel:9806751205)

Queries for tuples in range of 200-800:

Time taken to execute 1000 query is:

Without memcache: 19.[4048293849](tel:4048293849)

With memcache: 15.6585658333

Time taken to execute 5000 query is:

Without memcache: 101.[9086578234](tel:9086578234)

With memcache: 90.9834657910

Time taken to execute 20000 query is:

With memcache: 223.[5078932283](tel:5078932283)

Without memcache: 220.3791387568

C) **References:**

-http://aws.amazon.com/developers/getting-started/python

-http://boto.readthedocs.org/en/latest/

-http://docs.aws.amazon.com/cli/latest/userguide/cli-chap-welcome.html

-http://stackoverflow.com/questions/27436950/django-function-object-has-no-attribute-get

-https://dev.mysql.com/doc/refman/5.5/en/limit-optimization.html

-http://dev.mysql.com/doc/mysql-ha-scalability/en/ha-memcached-interfaces-python.html

-http://blog.echolibre.com/2009/11/memcache-and-python-getting-started/4/

-https://docs.python.org/2/library/hashlib.html

-http://www.fullstackpython.com/caching.html

-http://stackoverflow.com/questions/14612632/memcached-auto-discovery-python-support-on-aws-elasticache

D) **Screenshot**

