

# CS315: Assignment 3

Total Marks: 100

Due on: 7th April, 2015, 11:59pm

**Download the data files from here:**

<https://drive.google.com/file/d/0BwPwkWvfazQWjF3RGd0eFLyT0k/view?usp=sharing>

**Tips to students for running the commands (linux/mac):**

1. Run the following on your command line before trying to run the commands below  
export PATH = \$PATH:"the complete path to your bin directory for Mongo"
2. Start MongoDB daemon before attempting to run the commands

**Data Import:** Uzip sampledata.zip and change directory to it. Run the following to import data:

mongorestore (.exe) -d digg sampledata/dump/digg

mongorestore (.exe) -d training -c scores sampledata/dump/training/scores.bson

mongoimport (.exe) -d twitter -c tweets sampledata/twitter.json

## Exercises Set 1

1. In the training database, find all documents in the scores collection where the score is less than 65. (15 points)
2. Find the lowest quiz score. Find the highest quiz score. (15 points)
3. In the digg.stories collection, write a query to find all stories where the view count is greater than 1000. (15 points)
4. Find all digg stories where the topic name is Television or the media type is 'videos'. Skip the first 5 results, and limit the result set to 10. (15 points)
5. Query for all digg stories whose media type is either news or images and where the topic name is Comedy. (For extra practice, construct two queries using different sets of operators to do this.) (15 points)

**Reference:**

- <http://docs.mongodb.org/manual/reference/operators/>
- <http://docs.mongodb.org/manual/reference/method/db.collection.find/>
- <http://docs.mongodb.org/manual/reference/method/cursor.sort/>
- <http://docs.mongodb.org/manual/reference/method/cursor.skip/>
- <http://docs.mongodb.org/manual/reference/method/cursor.limit/>

## Exercises Set 2

1. Using the training.scores namespace, set the proper grade attributes. For example, users with scores greater than 90 get an A. Set the grade to B for scores falling between 80 and 90. (15 points)
2. You're being nice, so you decide to add 10 points to every score on every exam whose score is lower than 60. How do you do this update? (10 points)

## Update Operators

\$set, \$unset, \$inc, \$push, \$pushAll, \$pull, \$pullAll, \$pop, \$addToSet, \$rename, \$bit, \$positional operator

### References:

- <http://docs.mongodb.org/manual/reference/method/db.collection.update/>
- <http://docs.mongodb.org/manual/reference/operators/#update-operators>