**CS 207: Applied Database Practicum**

**In-Class Activity 9: Introduction to NoSQL, 21st October, 2019**

In this activity, you will be working in MongoDB.

Q1. Open MongoDB and perform the following action:

1. Create a database *CS207*
2. Create a collection *Students* inside the database *CS207* with the attributes given below and Insert all your group member details into the collection *students*:

|  |
| --- |
| **Attribute Name** |
| ROLL\_NO |
| Name |
| Age |
| Semester |
| GPA (MongoDBArray): CGPA, SGPA,UOM(Unit of measurement) |
| Hometown |

**Use GPA as default UOM in the MongoDBArray and enter your current semester.**

1. Display all the documents inside the collection *students*
2. Display only those documents where the CGPA is greater than 8
3. Update **Hometown** to *Mandi* and **uom** to *GP* for those document whose SGPA is less than 8.5
4. Delete the first document whose semester value is 3

BONUS: ONLY if you have done the above steps, then you can try this bonus for an extra point.

Q2. Using Bulkwrite (***In Bulkwrite all the operations are performed in a bulk***) perform the following action:

i) Insert into students the following 2 documents

|  |  |  |
| --- | --- | --- |
| **Attribute Name** | **Value** | **Value** |
| **ROLL\_NO** | B17033 | B17053 |
| **Name** | John | Harry |
| **Age** | 23 | 29 |
| **Semester** | 5 | 8 |
| **GPA (MongoDBArray): CGPA, SGPA,UOM** | CGPA: 7.9, SGPA: 7.95, uom: "Grade point" | CGPA: 9.9, SGPA: 9.95, uom: "Grade point" |
| **Hometown** | Kanpur | Lucknow |

ii) Change the *Hometown value to* ***Delhi*** for **Roll\_No: B17053**