

## Assignment II

1. Create an index having fields of the following types. Disable dynamic mapping for this index.

*Hint: This means to create an index with mapping having following types in properties.*

- Text
- Keyword
- Long
- Double
- Boolean
- geo\_point
- Date (allowing two different formats yyyy/MM/dd and MM-dd-yyyy, or any other formats that you prefer)
- Integer Range
- Array with text type values
- Inner Object (needs to have at least two properties)
- Nested object (need to have at least two properties)

2. Insert two valid documents, that is, with fields which match the types mentioned in (1)

3. Try inserting an invalid document to see the exception thrown.

4. Use **curl** command along with **\_bulk** API to insert the documents available in the file provided in mail (name: accounts.json) into **accounts** index.

5. Perform queries using Request URI to find the following:

- all documents
- age greater than equal to 30 and less than equal to 70
- females with age less than equals 25
- males belonging to **ME** state

6. Perform following **\_update\_by\_query** operations on accounts:

1. Add a new field **expense\_list** whose value is empty array [ ] for all documents.
2. Add a value 'student\_loan' into the expense\_list array for members having age greater than equals 10 and less than equals 25
3. Add two values 'car\_loan' and 'house\_loan' into expense\_list array for members having age greater than 25 and less than equals 50
4. Add a value 'recreation' for members having balance greater than equals 40000.
5. Decrease the balance by 2000 of members of state **PA**.

7. Perform **\_delete\_by\_query** to delete all records belonging to state: **KY**.

8. Perform following queries using Request Body with any values you want to:

- Term query
- Range query
- Prefix query
- Wildcard Query

9. Refer to **Terms** query in [Week II Notes](#) to do the following question:

A. Create an index **college** having following fields:

- batch (integer type): example values, 2017, 2018
- students (nested type, i.e. array of inner objects): each inner object can have two properties **id** and **name**.

B. Insert a document with certain id (example, 1), your batch (example, 2017), and an array of 3 students in index **college**.

C. Create an index **workshop** having following fields

- students\_id
- workshop\_about
- enrolled\_year

D. Bulk insert 5 documents in index **workshop**.

E. Using **terms** query, find the students of your batch enrolled in any workshop.