

CIND 119: Introduction to Big Data Analytics

Assignment 3 (15% of the final grade)

Querying a NoSQL database using MongoDB

Complete this assignment using MongoDB.

1. Create a database called “sample”. (1 point)
2. Create a collection called “test_data” and load the following data into the collection. (6 points)

| class | age | menopause | deg_malign | breast | breast_quad | irradiat |
|-------|-----|-----------|------------|--------|-------------|----------|
| NO | 35 | premeno | 3 | left | left_low | no |
| NO | 42 | premeno | 2 | right | right_up | no |
| NO | 30 | premeno | 2 | left | left_low | no |
| NO | 61 | ge40 | 2 | right | left_up | no |
| NO | 45 | premeno | 2 | right | right_low | no |
| NO | 64 | ge40 | 2 | left | left_low | no |
| NO | 52 | premeno | 2 | left | left_low | no |
| NO | 67 | ge40 | 1 | left | left_low | no |
| YES | 41 | premeno | 2 | left | left_low | no |
| YES | 43 | premeno | 2 | right | left_up | no |
| YES | 41 | premeno | 3 | left | central | no |
| YES | 44 | ge40 | 2 | left | left_low | no |

| | | | | | | |
|-----|----|---------|---|------|----------|----|
| YES | 61 | lt40 | 1 | left | right_up | no |
| YES | 55 | ge40 | 3 | left | right_up | no |
| YES | 44 | premeno | 3 | left | left_up | no |

3. Write MongoDB queries to select/compute data from the “test_data” collection. (2 points each)
- Select all rows where the menopause column has the value “ge40”.
 - Select all rows where age is less than 41.
 - Select all rows where age is less than 41 or the menopause column has the value “ge40”.
 - Compute the average age across all rows.

Reference: Full dataset available at [GroupLens](#)

End of CIND119 Assignment 3