CIND119: Assignment 3  
Ilhak Park

#1)

use sample

#2)

db.test\_data.insertMany([

{class: ‘NO’, age: 35, menopause: ‘premeno’, deg\_malig: 3, breast: ‘left’, breast\_quad: ‘left\_low’, irradiat: ‘no’},

{class: ‘NO’, age: 42, menopause: ‘premeno’, deg\_malig: 2, breast: ‘right’, breast\_quad: ‘right\_up’, irradiat: ‘no’},

{class: ‘NO’, age: 30, menopause: ‘premeno’, deg\_malig: 2, breast: ‘left’, breast\_quad: ‘left\_low’, irradiat: ‘no’},

{class: ‘NO’, age: 61, menopause: ‘ge40’, deg\_malig: 2, breast: ‘right’, breast\_quad: ‘left\_up’, irradiat: ‘no’},

{class: ‘NO’, age: 45, menopause: ‘premeno’, deg\_malig: 2, breast: ‘right’, breast\_quad: ‘right\_low’, irradiat: ‘no’},

{class: ‘NO’, age: 64, menopause: ‘ge40’, deg\_malig: 2, breast: ‘left’, breast\_quad: ‘left\_low’, irradiat: ‘no’},

{class: ‘NO’, age: 52, menopause: ‘premeno’, deg\_malig: 2, breast: ‘left’, breast\_quad: ‘left\_low’, irradiat: ‘no’},

{class: ‘NO’, age: 67, menopause: ‘ge40’, deg\_malig: 1, breast: ‘left’, breast\_quad: ‘left\_low’, irradiat: ‘no’},

{class: ‘YES’, age: 41, menopause: ‘premeno’, deg\_malig: 2, breast: ‘left’, breast\_quad: ‘left\_low’, irradiat: ‘no’},

{class: ‘YES’, age: 43, menopause: ‘premeno’, deg\_malig: 2, breast: ‘right’, breast\_quad: ‘left\_up’, irradiat: ‘no’},

{class: ‘YES’, age: 41, menopause: ‘premeno’, deg\_malig: 3, breast: ‘left’, breast\_quad: ‘central’, irradiat: ‘no’},

{class: ‘YES’, age: 44, menopause: ‘ge40’, deg\_malig: 2, breast: ‘left’, breast\_quad: ‘left\_low’, irradiat: ‘no’},

{class: ‘YES’, age: 61, menopause: ‘lt40’, deg\_malig: 1, breast: ‘left’, breast\_quad: ‘right\_up’, irradiat: ‘no’},

{class: ‘YES’, age: 55, menopause: ‘ge40’, deg\_malig: 3, breast: ‘left’, breast\_quad: ‘right\_up’, irradiat: ‘no’},

{class: ‘YES’, age: 44, menopause: ‘premeno’, deg\_malig: 3, breast: ‘left’, breast\_quad: ‘left\_up’, irradiat: ‘no’},

]);

3)

* 1. a. Select all rows where the menopause column has the value “ge40”.
  2. db.test\_data.find({menopause: ‘ge40’});
  3. b. Select all rows where age is less than 41.
  4. db.test\_data.find({age: {$lt: 41} });
  5. c. Select all rows where age is less than 41 or the menopause column has the value “ge40”.

db.test\_data.find({ $or: [{age: {$lt: 41}}, {menopause: ‘ge40’}] });

* 1. d. Compute the average age across all rows.

db.test\_data.aggregate([{ $group: {\_id:null, “average\_age”: {$avg: “$age”}}}]);