```
1
     Exe A Lab assi 1
 2
 3
 4
 5
     Create database Institute
 6
     > use Institute
 7
     switched to db Institute
 8
 9
10
     Create collection Student.
11
     > db.createCollection("Student")
12
     { "ok" : 1 }
13
14
15
     Insert 10 documents
16
     > db.Student.insert({
17
     ... S_id:"S111", S_name:"James Smith", Branch:"CSE", Age: 20, Panel:"E",
18
     ... Address: {Area: "Kothrud", City: "Pune", Pincode: 412300},
     ... Subjects:[{sub name:"DBMS",score:85},{sub name:"TOC",score:81}],
19
20
     ... Area of Interest: ["DBMS", "Networking"]
21
     ... });
22
     WriteResult({ "nInserted" : 1 })
23
24
     > db.Student.find().pretty()
25
              " id" : ObjectId("60bb5715ae0512016f998c3f"),
26
27
              "S id" : "S111",
              "S name" : "James Smith",
28
29
              "Branch" : "CSE",
              "Age" : 20,
30
              "Panel" : "E",
31
32
              "Address" : {
33
                      "Area": "Kothrud",
                      "City" : "Pune",
34
                      "Pincode" : 412300
35
36
              "Subjects" : [
37
38
                      {
39
                               "sub name" : "DBMS",
40
                               "score" : 85
41
                      },
42
                      {
43
                               "sub name" : "TOC",
44
                               "score" : 81
45
                      }
46
47
              "Area of Interest" : [
                      "DBMS",
48
49
                      "Networking"
50
              ]
51
     }
52
     >
53
     >
54
55
     > db.Student.insertMany([
56
     ... {S_id:"S112",S_name:"Michael Smith",Branch:"CSE",Age:20,Panel:"E",
57
     ... Address: {Area: "ShivTirth", City: "Pune", Pincode: 412301},
58
     ... Subjects:[{sub name:"DBMS",score:81},{sub name:"IS",score:83}],
59
     ... Area of Interest:["DBMS","AI","ML"]},
60
     ... {S_id:"S113",S_name:"Robert Smith",Branch:"ECE",Age:21,Panel:"A",
     ... Address: {Area: "Swargate", City: "Pune", Pincode: 412303},
61
62
     ... Subjects:[{sub_name:"AI",score:79},{sub_name:"TOC",score:80}],
63
     ... Area of Interest:["DBMS","AI","ML","Networking"]},
64
     ... {S id:"S114", S name: "Maria Garcia", Branch: "MECH", Age: 21, Panel: "A",
65
     ... Address: {Area: "Shivajinagar", City: "Pune", Pincode: 412307},
     ... Subjects:[{sub name:"IS", score:90}, {sub name:"AI", score:82}],
     ... Area_of_Interest:["DBMS","Networking"]},
67
     ... {S_id:"S115",S_name:"David Smith",Branch:"ECE",Age:20,Panel:"B",
68
     ... Address: {Area: "Kothrud", City: "Pune", Pincode: 412300},
69
```

```
... Subjects:[{sub name:"TOC",score:78},{sub name:"AI",score:80}],
 71
      ... Area of Interest: ["AI", "DS"] },
 72
      ... {S id: "S116", S name: "Maria Rodriguez", Branch: "CSE", Age: 21, Panel: "B",
      ... Address: {Area: "Sangamvadi", City: "Pune", Pincode: 412311},
 73
 74
      ... Subjects:[{sub name:"IS",score:72},{sub name:"TOC",score:75}],
 75
      ... Area_of_Interest:["Networking","DWDM","OS"]},
 76
      ... {S id: "S117", S name: "Mary Smith", Branch: "Civil", Age: 20, Panel: "C",
 77
      ... Address: {Area: "Hadapsar", City: "Pune", Pincode: 412312},
 78
      ... Subjects:[{sub name:"TOC", score:92}, {sub name:"IS", score:93}],
 79
      ... Area of Interest: ["DBMS", "DWDM", "OS"] },
 80
      ... {S id: "S118", S name: "Maria Hernandez", Branch: "Mech", Age: 21, Panel: "E",
      ... Address: {Area: "Swargate", City: "Pune", Pincode: 412303},
 81
      ... Subjects:[{sub name:"TOC",score:93},{sub name:"AI",score:91}],
 82
      ... Area of Interest: ["DBMS", "Web Dev"]},
 83
 84
      ... {S id: "S119", S name: "Lilly Martinez", Branch: "ECE", Age: 20, Panel: "C",
 85
      ... Address: {Area: "Kothrud", City: "Pune", Pincode: 412300},
      ... Subjects:[{sub_name:"IS",score:81},{sub name:"AI",score:90}],
 87
      ... Area of Interest: ["AWS", "Web Dev"]},
 88
      ... {S id: "S120", S name: "James Johnson", Branch: "CSE", Age: 21, Panel: "C",
 89
      ... Address: {Area: "Kothrud", City: "Pune", Pincode: 412300},
 90
      ... Subjects: [{sub name: "DBMS", score: 83}, {sub name: "AI", score: 87}],
 91
      ... Area of Interest: ["AWS", "Develops"] },
 92
      ...]);
 93
      {
 94
               "acknowledged" : true,
 95
               "insertedIds" : [
 96
                        ObjectId("60bb5739ae0512016f998c40"),
 97
                        ObjectId("60bb5739ae0512016f998c41"),
 98
                        ObjectId("60bb5739ae0512016f998c42"),
 99
                        ObjectId("60bb5739ae0512016f998c43"),
100
                        ObjectId("60bb5739ae0512016f998c44"),
101
                        ObjectId("60bb5739ae0512016f998c45"),
102
                        ObjectId("60bb5739ae0512016f998c46"),
103
                        ObjectId("60bb5739ae0512016f998c47"),
104
                        ObjectId("60bb5739ae0512016f998c48")
105
               ]
106
      }
107
      >
108
109
      > db.Student.find().pretty()
110
               " id" : ObjectId("60bb5715ae0512016f998c3f"),
111
               "S id" : "S111",
112
113
               "S name" : "James Smith",
               "Branch" : "CSE",
114
               "Age" : 20,
115
               "Panel" : "E",
116
117
               "Address" : {
118
                        "Area": "Kothrud",
                        "City" : "Pune",
119
120
                        "Pincode" : 412300
121
               "Subjects" : [
122
123
                        {
124
                                 "sub name" : "DBMS",
125
                                 "score": 85
126
                        },
127
                        {
128
                                 "sub name" : "TOC",
129
                                 "score" : 81
130
                        }
131
132
               "Area of Interest" : [
                        "DBMS",
133
134
                        "Networking"
135
               ]
136
      }
137
138
               " id" : ObjectId("60bb5739ae0512016f998c40"),
```

```
139
                "S id" : "S112",
140
                "S name" : "Michael Smith",
                "Branch" : "CSE",
141
                "Age" : 20,
"Panel" : "E",
142
143
                "Address" : {
144
                         "Area" : "ShivTirth",
145
                         "City" : "Pune",
146
147
                         "Pincode" : 412301
148
149
                "Subjects" : [
150
                         {
151
                                  "sub name" : "DBMS",
152
                                  "score" : 81
153
                         },
154
                         {
155
                                  "sub name" : "IS",
                                  "score" : 83
156
157
                         }
158
159
                "Area_of_Interest" : [
160
                         "DBMS",
                         "AI",
161
                         "ML"
162
163
                ]
164
165
      {
                " id" : ObjectId("60bb5739ae0512016f998c41"),
166
167
                "\overline{S} id" : "S113",
168
                "S name" : "Robert Smith",
169
                "Branch" : "ECE",
                "Age" : 21,
170
                "Panel" : "A",
171
                "Address" : {
172
                         "Area" : "Swargate",
173
                         "City" : "Pune",
174
                         "Pincode" : 412303
175
176
177
                "Subjects" : [
178
                         {
179
                                  "sub name" : "AI",
                                  "score" : 79
180
181
                         },
182
                         {
183
                                  "sub name" : "TOC",
                                  "score": 80
184
185
                         }
186
                "Area of Interest" : [
187
                         "DBMS",
188
189
                         "AI",
190
                         "ML",
191
                         "Networking"
192
                ]
193
      }
194
195
                " id" : ObjectId("60bb5739ae0512016f998c42"),
                "\overline{S} id" : "\overline{S}114",
196
                "S name" : "Maria Garcia",
197
                "Branch" : "MECH",
198
                "Age" : 21,
199
200
                "Panel" : "A",
                "Address" : {
201
202
                         "Area": "Shivajinagar",
203
                         "City" : "Pune",
204
                         "Pincode" : 412307
205
206
                "Subjects" : [
207
                         {
```

```
208
                                 "sub name" : "IS",
209
                                 "score": 90
210
                        },
211
                        {
212
                                 "sub name" : "AI",
                                 "score": 82
213
214
                        }
215
               ],
               "Area of_Interest" : [
216
217
                        "DBMS",
218
                        "Networking"
219
               ]
220
      }
221
      {
               " id" : ObjectId("60bb5739ae0512016f998c43"),
222
               "S id" : "S115",
223
224
               "S_name" : "David Smith",
225
               "Branch" : "ECE",
226
               "Age" : 20,
227
               "Panel" : "B",
228
               "Address" : {
229
                        "Area": "Kothrud",
230
                        "City" : "Pune",
                        "Pincode" : 412300
231
232
               "Subjects" : [
233
234
                        {
235
                                 "sub name" : "TOC",
                                 "score" : 78
236
237
                        },
238
                        {
239
                                 "sub name" : "AI",
                                 "score" : 80
240
241
                        }
242
               ],
               "Area_of_Interest" : [
243
                        "AI",
244
                        "DS"
245
246
               ]
247
      }
248
      {
               " id" : ObjectId("60bb5739ae0512016f998c44"),
249
               "S id" : "S116",
250
251
               "S name" : "Maria Rodriguez",
252
               "Branch" : "CSE",
253
               "Age" : 21,
               "Panel" : "B",
254
               "Address" : {
255
                        "Area" : "Sangamvadi",
256
                        "City" : "Pune",
257
258
                        "Pincode" : 412311
259
260
               "Subjects" : [
261
                        {
262
                                 "sub name" : "IS",
263
                                 "score" : 72
264
                        },
265
                        {
266
                                 "sub name" : "TOC",
                                 "score" : 75
267
268
                        }
269
               ],
270
               "Area of Interest" : [
271
                        "Networking",
272
                        "DWDM",
273
                        "OS"
274
               ]
275
      }
276
      {
```

```
277
               " id" : ObjectId("60bb5739ae0512016f998c45"),
               "\bar{S} id" : "S117",
278
               "S name" : "Mary Smith",
279
               "Branch" : "Civil",
280
               "Age" : 20,
281
               "Panel" : "C",
282
               "Address" : {
283
284
                        "Area" : "Hadapsar",
                        "City" : "Pune",
285
                        "Pincode" : 412312
286
287
               "Subjects" : [
288
289
                        {
290
                                 "sub name" : "TOC",
                                 "score": 92
291
                        },
292
293
                        {
294
                                 "sub name" : "IS",
295
                                 "score" : 93
296
                        }
297
               ],
298
               "Area of Interest" : [
299
                        "DBMS",
                        "DWDM",
300
301
                        "OS"
302
               ]
303
      }
304
      {
               " id" : ObjectId("60bb5739ae0512016f998c46"),
305
306
               "S id" : "S118",
               "S name" : "Maria Hernandez",
307
308
               "Branch" : "Mech",
309
               "Age" : 21,
               "Panel" : "E",
310
               "Address" : {
311
                        "Area" : "Swargate",
312
                        "City" : "Pune",
313
314
                        "Pincode" : 412303
315
316
               "Subjects" : [
317
                        {
318
                                 "sub name" : "TOC",
319
                                 "score" : 93
320
                        },
321
                        {
322
                                 "sub name" : "AI",
                                 "score": 91
323
324
                        }
325
326
               "Area of Interest" : [
327
                        "DBMS",
328
                        "Web Dev"
329
               ]
330
      }
331
332
               " id" : ObjectId("60bb5739ae0512016f998c47"),
333
               "\overline{S} id" : "S119",
               "S name" : "Lilly Martinez",
334
               "Branch" : "ECE",
335
               "Age" : 20,
336
               "Panel" : "C",
337
               "Address" : {
338
339
                        "Area" : "Kothrud",
340
                        "City" : "Pune",
341
                        "Pincode" : 412300
342
343
               "Subjects" : [
344
                        {
                                 "sub name" : "IS",
345
```

```
"score": 81
346
347
                         },
348
                         {
349
                                   "sub name" : "AI",
350
                                   "score" : 90
351
                         }
352
353
                "Area of Interest" : [
354
                         "AWS",
355
                         "Web Dev"
356
                ]
357
       }
358
       {
                " id" : ObjectId("60bb5739ae0512016f998c48"),
359
                "\bar{S} id" : "S120",
360
                "S name" : "James Johnson",
361
                "Branch" : "CSE",
362
                "Age" : 21,
363
                "Panel" : "C",
364
365
                "Address" : {
366
                         "Area": "Kothrud",
367
                         "City" : "Pune",
368
                         "Pincode" : 412300
369
370
                "Subjects" : [
371
                         {
372
                                   "sub name" : "DBMS",
373
                                   "score" : 83
374
                         },
375
                         {
376
                                   "sub name" : "AI",
377
                                   "score": 87
378
                         }
379
                "Area of Interest" : [
380
381
                         "AWS",
                         "Develops"
382
383
                ]
384
       }
385
386
387
       Increment Age by 2
388
       > db.Student.find({S id:"S111"})
       { "_id" : ObjectId("\bar{6}0bb5715ae0512016f998c3f"), "S_id" : "S111", "S_name" : "James
389
       Smith", "Branch" : "CSE", "Age" : 20, "Panel" : "E", "Address" : { "Area" : "Kothrud", "City" : "Pune", "Pincode" : 412300 }, "Subjects" : [ { "sub_name" : "DBMS", "score" :
       85 }, { "sub name" : "TOC", "score" : 81 } ], "Area of Interest" : [ "DBMS",
       "Networking" ] }
390
       > db.Student.find((S_id:"S111")).pretty()
391
392
                " id" : ObjectId("60bb5715ae0512016f998c3f"),
393
                "S id" : "S111",
                "S name" : "James Smith",
394
                "Branch" : "CSE",
395
396
                "Age" : 20,
397
                "Panel" : "E",
398
                "Address" : {
399
                         "Area" : "Kothrud",
                         "City" : "Pune",
400
                         "Pincode" : 412300
401
402
                "Subjects" : [
403
404
                         {
405
                                   "sub name" : "DBMS",
406
                                   "score": 85
407
                         },
408
                         {
409
                                   "sub name" : "TOC",
410
                                   "score" : 81
```

```
411
                       }
412
               ],
413
               "Area of Interest" : [
                       "DBMS",
414
415
                        "Networking"
416
               ]
417
      }
418
      >
419
      > db.Student.update({S id:"S111"}, {$inc:{Age:2}});
420
      WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
421
422
      > db.Student.find({S id:"S111"}).pretty()
423
424
               " id" : ObjectId("60bb5715ae0512016f998c3f"),
               \overline{S} id" : "S111",
425
               "S name" : "James Smith",
426
               "Branch" : "CSE",
427
428
               "Age" : 22,
429
               "Panel" : "E",
430
               "Address" : {
431
                       "Area": "Kothrud",
432
                       "City" : "Pune",
433
                       "Pincode" : 412300
434
               "Subjects" : [
435
436
                        {
437
                                "sub name" : "DBMS",
438
                                "score": 85
439
                       },
440
                        {
441
                                "sub name" : "TOC",
442
                                "score" : 81
443
                       }
444
               ],
               "Area of Interest" : [
445
                       "DBMS",
446
447
                        "Networking"
448
               ]
449
      }
450
451
452
453
      Push Area of Interest
454
      > db.Student.update({S id:"S111"},{$push:{Area of Interest:{$each:["NLP"]}}})
455
      WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
456
457
      > db.Student.find({S id:"S111"}).pretty()
458
459
               " id" : ObjectId("60bb5715ae0512016f998c3f"),
460
               "S id" : "S111",
               "S_name" : "James Smith",
461
462
               "Branch" : "CSE",
463
               "Age" : 22,
               "Panel" : "E",
464
465
               "Address" : {
466
                       "Area" : "Kothrud",
467
                       "City" : "Pune",
                       "Pincode" : 412300
468
469
               "Subjects" : [
470
471
                        {
472
                                "sub name" : "DBMS",
473
                                "score": 85
474
                       },
475
                        {
476
                                "sub name" : "TOC",
477
                                "score": 81
478
                        }
479
               ],
```

```
480
               "Area of Interest" : [
481
                       "DBMS",
482
                       "Networking",
483
                        "NLP"
484
               ]
485
      }
486
487
488
489
      pop subjects
490
      > db.Student.update({S id:"S111"},{$pop:{Subjects:-1}})
      WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
491
      > db.Student.find({S id:"S111"}).pretty()
492
493
               " id" : ObjectId("60bb5715ae0512016f998c3f"),
494
               "S id" : "S111",
495
496
               "S_name" : "James Smith",
497
               "Branch" : "CSE",
498
               "Age" : 22,
499
               "Panel" : "E",
500
               "Address" : {
501
                       "Area": "Kothrud",
502
                       "City" : "Pune",
                       "Pincode" : 412300
503
504
               "Subjects" : [
505
506
                       {
507
                                "sub name" : "TOC",
                                "score" : 81
508
509
                       }
510
511
               "Area_of_Interest" : [
                       "DBMS",
512
513
                       "Networking",
514
                        "NLP"
515
               ]
516
517
518
519
      Update record
520
      >
      db.Student.update({S id:"S111"}, {$set:{Branch:"Mech", Address:{Area:"Hadapsar", Pincode:412
521
      WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
522
523
      > db.Student.find((S_id:"S111")).pretty()
524
               " id" : ObjectId("60bb5715ae0512016f998c3f"),
525
               "S id" : "S111",
526
527
               "S name" : "James Smith",
528
               "Branch" : "Mech",
               "Age" : 22,
529
530
               "Panel" : "E",
               "Address" : {
531
532
                       "Area" : "Hadapsar",
                       "Pincode" : 412312
533
534
535
               "Subjects" : [
536
                        {
                                "sub name" : "TOC",
537
538
                                "score" : 81
539
                        }
540
541
               "Area of Interest" : [
542
                       "DBMS",
543
                       "Networking",
544
                       "NLP"
545
               ]
546
```

```
548
549
550
551
      Update Panel B to Panel A
552
      > db.Student.update({Panel:"B"},{$set:{Panel:"A"}},{multi:true})
      WriteResult({ "nMatched" : 2, "nUpserted" : 0, "nModified" : 2 })
553
554
555
      > db.Student.find({Panel:"A"}).pretty()
556
557
               " id" : ObjectId("60bb5739ae0512016f998c41"),
               \overline{S} id" : "S113",
558
               "S name": "Robert Smith",
559
               "Branch" : "ECE",
560
               "Age" : 21,
561
               "Panel" : "A",
562
               "Address" : {
563
564
                        "Area" : "Swargate",
565
                        "City" : "Pune",
566
                        "Pincode" : 412303
567
568
               "Subjects" : [
569
                        {
570
                                 "sub name" : "AI",
571
                                 "score" : 79
572
                        },
573
                        {
574
                                 "sub name" : "TOC",
                                 "score" : 80
575
576
                        }
577
               ],
               "Area of Interest" : [
578
                        "DBMS",
579
                        "AI",
580
                        "ML",
581
582
                        "Networking"
583
               ]
584
      }
585
586
               " id" : ObjectId("60bb5739ae0512016f998c42"),
               "S id" : "S114",
587
               "S name" : "Maria Garcia",
588
589
               "Branch" : "MECH",
590
               "Age" : 21,
               "Panel" : "A",
591
               "Address" : {
592
593
                        "Area": "Shivajinagar",
                        "City" : "Pune",
594
                        "Pincode" : 412307
595
596
597
               "Subjects" : [
598
                        {
599
                                 "sub name" : "IS",
                                 "score" : 90
600
601
                        },
602
                        {
603
                                 "sub name" : "AI",
604
                                 "score": 82
605
                        }
606
               ],
607
               "Area_of_Interest" : [
608
                        "DBMS",
609
                        "Networking"
610
               ]
611
      }
612
               " id" : ObjectId("60bb5739ae0512016f998c43"),
613
               \bar{S} id" : "S115",
614
615
               "S name" : "David Smith",
```

547

```
"Branch" : "ECE",
616
617
               "Age" : 20,
                "Panel" : "A",
618
                "Address" : {
619
620
                        "Area": "Kothrud",
                        "City" : "Pune",
621
                        "Pincode" : 412300
622
623
                "Subjects" : [
624
625
                         {
626
                                  "sub name" : "TOC",
627
                                  "score" : 78
628
                        },
629
                         {
                                  "sub name" : "AI",
630
631
                                  "score" : 80
632
                         }
633
               ],
634
                "Area of Interest" : [
635
                        "AI",
                        "DS"
636
637
               1
638
      }
639
               " id" : ObjectId("60bb5739ae0512016f998c44"),
640
               \overline{S} id" : "S116",
641
642
               "S name" : "Maria Rodriguez",
643
               "Branch" : "CSE",
               "Age" : 21,
644
               "Panel" : "A",
645
               "Address" : {
646
647
                        "Area": "Sangamvadi",
                        "City" : "Pune",
648
                        "Pincode" : 412311
649
650
                "Subjects" : [
651
652
                         {
653
                                  "sub name" : "IS",
654
                                  "score" : 72
655
                        },
656
                         {
657
                                  "sub name" : "TOC",
                                  "score" : 75
658
659
                        }
660
661
               "Area of Interest" : [
                        \overline{\ }Networking",
662
                        "DWDM",
663
                        "OS"
664
665
               ]
666
      }
667
668
669
670
671
      Update with upsert
672
673
      > db.Student.update({S id:"S121"},{$set:{Branch:"CSE",Panel:"A"}},{upsert:true})
674
      WriteResult({
675
               "nMatched" : 0,
                "nUpserted" : 1,
676
677
               "nModified" : 0,
678
                " id" : ObjectId("60bb5830f5322caf711ed8b1")
679
      })
680
      >
681
      > db.Student.find({S id:"S121"}).pretty()
682
683
                " id" : ObjectId("60bb5830f5322caf711ed8b1"),
               \overline{S} id" : "S121",
684
```

```
685
               "Branch" : "CSE",
686
               "Panel" : "A"
687
      }
688
      >
689
      > db.Student.remove({Panel:"C"})
690
      WriteResult({ "nRemoved" : 3 })
691
692
      > db.Student.find({"Subjects.score":{$gte:85}})
693
      { "id": ObjectId("60bb5739ae0512016f998c42"), "Sid": "S114", "S name": "Maria
      Garcia", "Branch": "MECH", "Age": 21, "Panel": "A", "Address": { "Area":
      "Shivajinagar", "City" : "Pune", "Pincode" : 412307 }, "Subjects" : [ { "sub name" :
      "IS", "score" : 90 }, { "sub_name" : "AI", "score" : 82 } ], "Area_of_Interest" : [
      "DBMS", "Networking" ] }
       { " id" : ObjectId("60bb5739ae0512016f998c46"), "S id" : "S118", "S_name" : "Maria
694
      Hernandez", "Branch": "Mech", "Age": 21, "Panel": "E", "Address": { "Area": "Swargate", "City": "Pune", "Pincode": 412303 }, "Subjects": [ { "sub_name": "TOC",
      "score" : 93 }, { "sub name" : "AI", "score" : 91 } ], "Area of Interest" : [ "DBMS",
      "Web Dev" ] }
695
      > db.Student.find({"Subjects.score":{$gte:85}}).pretty()
696
697
               " id" : ObjectId("60bb5739ae0512016f998c42"),
               "\overline{S} id" : "S114",
698
699
               "S name" : "Maria Garcia",
               "Branch" : "MECH",
700
701
               "Age" : 21,
702
               "Panel" : "A",
703
               "Address" : {
                        "Area" : "Shivajinagar",
704
705
                        "City" : "Pune",
706
                        "Pincode" : 412307
707
708
               "Subjects" : [
709
                        {
710
                                 "sub name" : "IS",
711
                                 "score" : 90
712
                        },
713
                        {
714
                                 "sub name" : "AI",
715
                                 "score" : 82
716
                        }
717
718
               "Area_of_Interest" : [
                        "DBMS",
719
720
                        "Networking"
721
               ]
722
      }
723
               " id" : ObjectId("60bb5739ae0512016f998c46"),
724
               "S id" : "S118",
725
726
               "S name" : "Maria Hernandez",
727
               "Branch" : "Mech",
               "Age" : 21,
728
729
               "Panel" : "E",
730
               "Address" : {
731
                        "Area" : "Swargate",
732
                        "City" : "Pune",
733
                        "Pincode" : 412303
734
735
               "Subjects" : [
736
                        {
737
                                 "sub name" : "TOC",
738
                                 "score" : 93
739
                        },
740
                        {
741
                                 "sub name" : "AI",
742
                                 "score" : 91
743
                        }
744
               "Area of Interest" : [
745
```

```
"DBMS",
746
747
                        "Web Dev"
748
               ]
749
750
751
752
753
      Use $gt, $gte, $lt
754
755
      > db.Student.find({"Subjects.score":{$gt:90}}).pretty()
756
      {
757
               " id" : ObjectId("60bb5739ae0512016f998c46"),
               "\bar{S} id" : "S118",
758
               "S name" : "Maria Hernandez",
759
               "Branch" : "Mech",
760
               "Age" : 21,
761
               "Panel" : "E",
762
               "Address" : {
763
764
                        "Area" : "Swargate",
765
                        "City" : "Pune",
766
                        "Pincode" : 412303
767
768
               "Subjects" : [
769
                        {
770
                                 "sub name" : "TOC",
771
                                 "score" : 93
772
                        },
773
                        {
774
                                 "sub name" : "AI",
775
                                 "score" : 91
776
                        }
777
               ],
778
               "Area of Interest" : [
779
                        "DBMS",
780
                        "Web Dev"
781
               ]
782
      }
783
      >
784
785
      > db.Student.find({"Subjects.score":{$1t:80}}).pretty()
786
787
               " id" : ObjectId("60bb5739ae0512016f998c41"),
               "S id" : "S113",
788
789
               "S name" : "Robert Smith",
790
               "Branch" : "ECE",
               "Age" : 21,
791
               "Panel" : "A",
792
               "Address" : {
793
                        "Area" : "Swargate",
794
795
                        "City" : "Pune",
796
                        "Pincode" : 412303
797
798
               "Subjects" : [
799
                        {
800
                                 "sub name" : "AI",
801
                                 "score" : 79
802
                        },
803
                        {
804
                                 "sub name" : "TOC",
                                 "score": 80
805
806
                        }
807
               ],
808
               "Area of Interest" : [
809
                        "DBMS",
                        "AI",
810
                        "ML",
811
812
                        "Networking"
813
               ]
814
```

```
815
      {
816
               " id" : ObjectId("60bb5739ae0512016f998c43"),
               \overline{S} id" : "S115",
817
818
               "S name": "David Smith",
               "Branch" : "ECE",
819
820
               "Age" : 20,
               "Panel" : "A",
821
               "Address" : {
822
                        "Area" : "Kothrud",
823
                        "City" : "Pune",
824
825
                        "Pincode": 412300
826
827
               "Subjects" : [
828
                        {
                                 "sub name" : "TOC",
829
830
                                 "score" : 78
831
                        },
832
                        {
833
                                 "sub name" : "AI",
834
                                 "score" : 80
835
                        }
836
               ],
               "Area of Interest" : [
837
                        "AI",
838
                        "DS"
839
840
               ]
841
      }
842
      {
843
               " id" : ObjectId("60bb5739ae0512016f998c44"),
844
               "S id" : "S116",
               "S name" : "Maria Rodriguez",
845
846
               "Branch" : "CSE",
847
               "Age" : 21,
               "Panel" : "A",
848
               "Address" : {
849
                        "Area" : "Sangamvadi",
850
                        "City" : "Pune",
851
852
                        "Pincode" : 412311
853
854
               "Subjects" : [
855
                        {
856
                                 "sub name" : "IS",
                                 "score" : 72
857
858
                        },
859
                        {
860
                                 "sub name" : "TOC",
861
                                 "score": 75
862
                        }
863
               ],
864
               "Area_of_Interest" : [
865
                        "Networking",
                        "DWDM",
866
867
                        "OS"
868
               ]
869
      }
870
      >
871
      >
872
873
      > db.Student.find({Age:{$gt:20}}).pretty()
874
875
               "_id" : ObjectId("60bb5715ae0512016f998c3f"),
               "\bar{S} id" : "S111",
876
               "S name" : "James Smith",
877
878
               "Branch" : "Mech",
879
               "Age" : 22,
880
               "Panel" : "E",
881
               "Address" : {
882
                        "Area" : "Hadapsar",
                        "Pincode" : 412312
883
```

```
884
885
               "Subjects" : [
886
                        {
887
                                 "sub name" : "TOC",
888
                                 "score" : 81
889
                        }
890
891
               "Area of Interest" : [
                        "DBMS",
892
893
                        "Networking",
                        "NLP"
894
895
               ]
896
      }
897
               " id" : ObjectId("60bb5739ae0512016f998c41"),
898
               "S_id" : "S113",
899
900
               "S_name" : "Robert Smith",
901
               "Branch" : "ECE",
902
               "Age" : 21,
903
               "Panel" : "A",
904
               "Address" : {
905
                        "Area": "Swargate",
906
                        "City" : "Pune",
907
                        "Pincode" : 412303
908
               "Subjects" : [
909
910
                        {
911
                                 "sub name" : "AI",
                                 "score" : 79
912
913
                        },
914
                        {
915
                                 "sub name" : "TOC",
                                 "score" : 80
916
917
                        }
918
               ],
               "Area of Interest" : [
919
                        "DBMS",
920
921
                        "AI",
922
                        "ML",
923
                        "Networking"
924
               ]
925
      }
926
927
               " id" : ObjectId("60bb5739ae0512016f998c42"),
               "\bar{S} id" : "S114",
928
               "S name" : "Maria Garcia",
929
               "Branch" : "MECH",
930
               "Age" : 21,
931
               "Panel" : "A",
932
933
               "Address" : {
                        "Area" : "Shivajinagar",
934
                        "City" : "Pune",
935
                        "Pincode" : 412307
936
937
938
               "Subjects" : [
939
                        {
940
                                 "sub name" : "IS",
                                 "score" : 90
941
942
                        },
943
                        {
944
                                 "sub name" : "AI",
945
                                 "score": 82
946
                        }
947
               "Area of_Interest" : [
948
949
                        "DBMS",
950
                        "Networking"
951
               ]
952
```

```
953
       {
 954
                " id" : ObjectId("60bb5739ae0512016f998c44"),
                \overline{S} id" : "S116",
 955
 956
                "S name": "Maria Rodriguez",
                "Branch" : "CSE",
 957
 958
                "Age" : 21,
                "Panel" : "A",
 959
                "Address" : {
 960
                         "Area" : "Sangamvadi",
 961
                         "City" : "Pune",
 962
 963
                         "Pincode" : 412311
 964
 965
                "Subjects" : [
 966
                         {
                                  "sub name" : "IS",
 967
 968
                                  "score" : 72
 969
                         },
 970
                         {
 971
                                  "sub name" : "TOC",
 972
                                  "score" : 75
 973
                         }
 974
                ],
                "Area of Interest" : [
 975
 976
                         "Networking",
 977
                         "DWDM",
                         "OS"
 978
 979
                ]
 980
       }
 981
       {
 982
                " id" : ObjectId("60bb5739ae0512016f998c46"),
                "S id" : "S118",
 983
 984
                "S name" : "Maria Hernandez",
 985
                "Branch": "Mech",
                "Age" : 21,
 986
                "Panel" : "E",
 987
                "Address" : {
 988
                         "Area" : "Swargate",
 989
 990
                         "City" : "Pune",
 991
                         "Pincode" : 412303
 992
                },
 993
                "Subjects" : [
 994
                         {
 995
                                  "sub name" : "TOC",
 996
                                  "score" : 93
 997
                         },
 998
                         {
 999
                                  "sub name" : "AI",
1000
                                  "score" : 91
1001
                         }
1002
1003
                "Area of Interest" : [
1004
                         "DBMS",
1005
                         "Web Dev"
1006
                ]
1007
       }
1008
1009
1010
1011
1012
       Record starting with M
1013
       > db.Student.find({S_name:{$regex:/^M/}}).pretty()
1014
       {
1015
                " id" : ObjectId("60bb5739ae0512016f998c40"),
                "\overline{S} id" : "S112",
1016
                "S name" : "Michael Smith",
1017
1018
                "Branch" : "CSE",
                "Age" : 20,
1019
                "Panel" : "E",
1020
                "Address" : {
1021
```

```
1022
                         "Area": "ShivTirth",
1023
                         "City" : "Pune",
                         "Pincode" : 412301
1024
1025
                "Subjects" : [
1026
1027
                         {
1028
                                  "sub name" : "DBMS",
                                  "score": 81
1029
1030
                         },
1031
                         {
1032
                                  "sub name" : "IS",
1033
                                  "score" : 83
1034
                         }
1035
                "Area of_Interest" : [
1036
                         "DBMS",
1037
1038
                         "AI",
1039
                         "ML"
1040
                ]
1041
1042
                " id" : ObjectId("60bb5739ae0512016f998c42"),
1043
                "S id" : "S114",
1044
                "S name" : "Maria Garcia",
1045
                "Branch" : "MECH",
1046
1047
                "Age" : 21,
1048
                "Panel" : "A",
1049
                "Address" : {
                         "Area" : "Shivajinagar",
1050
                         "City" : "Pune",
1051
                         "Pincode" : 412307
1052
1053
                "Subjects" : [
1054
1055
                         {
1056
                                  "sub name" : "IS",
                                  "score" : 90
1057
1058
                         },
1059
                         {
1060
                                  "sub name" : "AI",
1061
                                  "score" : 82
1062
                         }
1063
                ],
1064
                "Area of Interest" : [
1065
                         "DBMS",
1066
                         "Networking"
1067
                ]
1068
       }
1069
                " id" : ObjectId("60bb5739ae0512016f998c44"),
1070
1071
                "S_id" : "S116",
                "S_name" : "Maria Rodriguez",
1072
1073
                "Branch" : "CSE",
1074
                "Age" : 21,
1075
                "Panel" : "A",
1076
                "Address" : {
1077
                         "Area": "Sangamvadi",
1078
                         "City" : "Pune",
                         "Pincode" : 412311
1079
1080
                "Subjects" : [
1081
1082
                         {
1083
                                  "sub name" : "IS",
1084
                                  "score" : 72
1085
                         },
1086
                         {
                                  "sub name" : "TOC",
1087
1088
                                  "score" : 75
1089
                         }
1090
                ],
```

```
1091
                "Area of Interest" : [
1092
                         "Networking",
1093
                         "DWDM",
1094
                         "OS"
1095
                ]
1096
       }
1097
       {
1098
                " id" : ObjectId("60bb5739ae0512016f998c46"),
                "\bar{S} id" : "S118",
1099
                "S name" : "Maria Hernandez",
1100
1101
                "Branch" : "Mech",
                "Age" : 21,
1102
                "Panel" : "E",
1103
                "Address" : {
1104
1105
                         "Area" : "Swargate",
                         "City" : "Pune",
1106
                         "Pincode" : 412303
1107
1108
1109
                "Subjects" : [
1110
                         {
1111
                                  "sub name" : "TOC",
1112
                                  "score" : 93
1113
                         },
1114
                         {
1115
                                  "sub name" : "AI",
1116
                                  "score" : 91
1117
                         }
1118
                ],
                "Area_of_Interest" : [
1119
1120
                         "DBMS",
1121
                         "Web Dev"
1122
                ]
1123
1124
       >
1125
1126
       > db.Student.find({S name:{$regex:/z$/}}).pretty()
1127
1128
                " id" : ObjectId("60bb5739ae0512016f998c44"),
1129
                "S_id" : "S116",
                "S_name" : "Maria Rodriguez",
1130
1131
                "Branch" : "CSE",
1132
                "Age" : 21,
                "Panel" : "A",
1133
1134
                "Address" : {
                         "Area" : "Sangamvadi",
1135
                         "City" : "Pune",
1136
                         "Pincode" : 412311
1137
1138
                "Subjects" : [
1139
1140
                         {
1141
                                  "sub name" : "IS",
1142
                                  "score" : 72
1143
                         },
1144
                         {
1145
                                  "sub name" : "TOC",
1146
                                  "score" : 75
1147
                         }
1148
                "Area of_Interest" : [
1149
                         "Networking",
1150
1151
                         "DWDM",
                         "OS"
1152
1153
                ]
1154
       }
1155
                " id" : ObjectId("60bb5739ae0512016f998c46"),
1156
                "\overline{S} id" : "S118",
1157
                "S name" : "Maria Hernandez",
1158
1159
                "Branch" : "Mech",
```

```
"Age" : 21,
1160
1161
                "Panel" : "E",
                "Address" : {
1162
                        "Area" : "Swargate",
1163
                        "City" : "Pune",
1164
                        "Pincode" : 412303
1165
1166
1167
                "Subjects" : [
1168
                         {
                                 "sub name" : "TOC",
1169
1170
                                 "score" : 93
1171
                        },
1172
                         {
                                 "sub_name" : "AI",
1173
                                 "score": 91
1174
1175
                         }
1176
                ],
1177
                "Area of Interest" : [
1178
                        "DBMS",
1179
                        "Web Dev"
1180
                ]
1181
       }
1182
1183
1184
1185
       Total number od Doc
1186
       > db.Student.count()
1187
1188
1189
1190
1191
       Doc with Area of Interest having four value
1192
       > db.Student.find({Area of Interest:{$size:4}}).pretty()
1193
       {
1194
                " id" : ObjectId("60bb5739ae0512016f998c41"),
                "S id" : "S113",
1195
                "S name": "Robert Smith",
1196
1197
                "Branch" : "ECE",
1198
                "Age" : 21,
1199
                "Panel" : "A",
1200
                "Address" : {
1201
                        "Area" : "Swargate",
1202
                        "City" : "Pune",
1203
                        "Pincode" : 412303
1204
                "Subjects" : [
1205
1206
                         {
1207
                                 "sub name" : "AI",
                                 "score" : 79
1208
1209
                        },
1210
                         {
1211
                                 "sub name" : "TOC",
                                 "score": 80
1212
                        }
1213
1214
1215
                "Area of Interest" : [
                        "DBMS",
1216
1217
                        "AI",
                        "ML",
1218
1219
                         "Networking"
1220
                ]
1221
       }
1222
1223
1224
1225
       Display only name
1226
       > db.Student.find({},{_id:0,S_name:1}).pretty()
1227
       { "S_name" : "James Smith" }
1228
       { "S_name" : "Michael Smith" }
```

```
1229
       { "S name" : "Robert Smith" }
1230
         "S name" : "Maria Garcia" }
         "S name" : "David Smith" }
1231
         "S name" : "Maria Rodriguez" }
1232
       { "S name" : "Maria Hernandez" }
1233
1234
1235
1236
1237
1238
       Sorting Doc in descending
1239
       > db.Student.find().sort({S name:-1}).pretty()
1240
1241
                " id" : ObjectId("60bb5739ae0512016f998c41"),
1242
                "\overline{S} id" : "S113",
                "S name" : "Robert Smith",
1243
1244
                "Branch" : "ECE",
1245
                "Age" : 21,
                "Panel" : "A",
1246
1247
                "Address" : {
1248
                         "Area" : "Swargate",
1249
                         "City" : "Pune",
1250
                         "Pincode" : 412303
1251
                "Subjects" : [
1252
1253
                         {
1254
                                  "sub name" : "AI",
1255
                                  "score" : 79
1256
                         },
1257
                         {
1258
                                 "sub name" : "TOC",
                                 "score": 80
1259
1260
                         }
1261
                "Area of Interest" : [
1262
                         "DBMS",
1263
1264
                         "AI",
1265
                         "ML",
1266
                         "Networking"
1267
                ]
1268
       }
1269
                " id" : ObjectId("60bb5739ae0512016f998c40"),
1270
                "S id" : "S112",
1271
1272
                "S name" : "Michael Smith",
1273
                "Branch" : "CSE",
                "Age" : 20,
1274
                "Panel" : "E",
1275
                "Address" : {
1276
                         "Area" : "ShivTirth",
1277
1278
                         "City" : "Pune",
1279
                         "Pincode" : 412301
1280
1281
                "Subjects" : [
1282
                         {
1283
                                  "sub name" : "DBMS",
1284
                                  "score" : 81
1285
                         },
1286
                         {
                                  "sub name" : "IS",
1287
                                  "score": 83
1288
1289
                         }
1290
1291
                "Area of Interest" : [
1292
                         "DBMS",
                         "AI",
1293
                         "ML"
1294
1295
                ]
1296
1297
```

```
1298
                 " id" : ObjectId("60bb5739ae0512016f998c44"),
1299
                "S id" : "S116",
                 "S name" : "Maria Rodriguez",
1300
                "Branch" : "CSE",
1301
1302
                 "Age" : 21,
                 "Panel" : "A",
1303
                 "Address" : {
1304
1305
                         "Area" : "Sangamvadi",
                         "City" : "Pune",
1306
                         "Pincode" : 412311
1307
1308
                 "Subjects" : [
1309
1310
                          {
                                  "sub name" : "IS",
1311
                                  "score": 72
1312
1313
                         },
1314
                          {
1315
                                  "sub name" : "TOC",
1316
                                  "score" : 75
1317
                          }
1318
                ],
1319
                 "Area of Interest" : [
1320
                         "Networking",
                         "DWDM",
1321
1322
                         "0S"
1323
                ]
1324
       }
1325
                " id" : ObjectId("60bb5739ae0512016f998c46"),
1326
                \overline{S} id": "S118",
1327
                "S name" : "Maria Hernandez",
1328
1329
                "Branch" : "Mech",
1330
                "Age" : 21,
                "Panel" : "E",
1331
                 "Address" : {
1332
                         "Area" : "Swargate",
"City" : "Pune",
1333
1334
1335
                         "Pincode" : 412303
1336
1337
                 "Subjects" : [
1338
                          {
1339
                                  "sub name" : "TOC",
1340
                                  "score" : 93
1341
                         },
1342
                          {
                                  "sub name" : "AI",
1343
                                  "score": 91
1344
1345
                          }
1346
1347
                 "Area of Interest" : [
1348
                          "DBMS",
1349
                         "Web Dev"
1350
                ]
1351
       }
1352
1353
                " id" : ObjectId("60bb5739ae0512016f998c42"),
1354
                "\overline{S} id" : "S114",
                "S name" : "Maria Garcia",
1355
                 "Branch" : "MECH",
1356
                 "Age" : 21,
1357
1358
                 "Panel" : "A",
                 "Address" : {
1359
1360
                         "Area" : "Shivajinagar",
1361
                         "City" : "Pune",
1362
                         "Pincode" : 412307
1363
1364
                 "Subjects" : [
1365
                          {
1366
                                  "sub name" : "IS",
```

```
1367
                                   "score": 90
1368
                          },
1369
                          {
1370
                                   "sub name" : "AI",
1371
                                   "score" : 82
1372
                          }
1373
1374
                 "Area of Interest" : [
                          "DBMS",
1375
1376
                          "Networking"
1377
                 ]
1378
        }
1379
        {
                 " id" : ObjectId("60bb5715ae0512016f998c3f"),
1380
                 \overline{S} id" : "S111",
1381
                 "S_name" : "James Smith",
"Branch" : "Mech",
1382
1383
                 "Age" : 22,
1384
1385
                 "Panel" : "E",
1386
                 "Address" : {
1387
                          "Area" : "Hadapsar",
1388
                          "Pincode" : 412312
1389
                 "Subjects" : [
1390
1391
                          {
1392
                                   "sub name" : "TOC",
1393
                                   "score" : 81
1394
                          }
1395
                 ],
1396
                 "Area of Interest" : [
                         "DBMS",
1397
                          "Networking",
1398
                          "NLP"
1399
1400
                 ]
1401
        }
1402
        {
1403
                 " id" : ObjectId("60bb5739ae0512016f998c43"),
1404
                 "S id" : "S115",
1405
                 "S_name" : "David Smith",
1406
                 "Branch" : "ECE",
                 "Age" : 20,
1407
                 "Panel" : "A",
1408
                 "Address" : {
1409
1410
                          "Area": "Kothrud",
1411
                          "City" : "Pune",
                          "Pincode" : 412300
1412
1413
1414
                 "Subjects" : [
1415
                          {
1416
                                   "sub name" : "TOC",
1417
                                   "score" : 78
1418
                          },
1419
                          {
1420
                                   "sub name" : "AI",
1421
                                   "score": 80
1422
                          }
1423
                 ],
1424
                 "Area of Interest" : [
                          "AI",
1425
                          "DS"
1426
1427
                 ]
1428
       }
1429
        {
                 " id" : ObjectId("60bb5830f5322caf711ed8b1"),
1430
                 "\overline{S} id" : "S121",
1431
                 "Branch" : "CSE",
1432
1433
                 "Panel" : "A"
1434
        }
1435
```

```
1437
1438
       Query using and operation
1439
       > db.Student.find({$and:[{Age:{$gt:20}},{Panel:"A"}]}).pretty()
1440
1441
                " id" : ObjectId("60bb5739ae0512016f998c41"),
                "\overline{S} id" : "S113",
1442
1443
                "S name" : "Robert Smith",
1444
                "Branch" : "ECE",
1445
                "Age" : 21,
                "Panel" : "A",
                "Address" : {
1447
                         "Area" : "Swargate",
1448
                         "City" : "Pune",
1449
                         "Pincode" : 412303
1450
1451
                "Subjects" : [
1452
1453
                         {
1454
                                  "sub name" : "AI",
1455
                                  "score" : 79
1456
                         },
1457
                         {
1458
                                  "sub name" : "TOC",
                                  "score" : 80
1459
                         }
1460
1461
                "Area of Interest" : [
1462
                         "DBMS",
1463
1464
                         "AI",
1465
                         "ML",
1466
                         "Networking"
1467
                ]
1468
1469
                " id" : ObjectId("60bb5739ae0512016f998c42"),
1470
                "\overline{S} id" : "S114",
1471
                "S name" : "Maria Garcia",
1472
1473
                "Branch" : "MECH",
1474
                "Age" : 21,
                "Panel" : "A",
1475
1476
                "Address" : {
1477
                         "Area": "Shivajinagar",
                         "City" : "Pune",
1478
1479
                         "Pincode" : 412307
1480
                "Subjects" : [
1481
1482
                         {
1483
                                  "sub name" : "IS",
1484
                                  "score" : 90
1485
                         },
1486
                         {
1487
                                  "sub name" : "AI",
1488
                                  "score": 82
                         }
1489
                ],
1491
                "Area of Interest" : [
1492
                         "DBMS",
1493
                         "Networking"
1494
                ]
1495
       }
1496
                "_id" : ObjectId("60bb5739ae0512016f998c44"),
1497
1498
                "S id" : "S116",
1499
                "S name": "Maria Rodriguez",
                "Branch" : "CSE",
1500
1501
                "Age" : 21,
                "Panel" : "A",
1502
                "Address" : {
1503
1504
                         "Area": "Sangamvadi",
```

1436

```
1505
                         "City" : "Pune",
1506
                          "Pincode" : 412311
1507
                 "Subjects" : [
1508
1509
                          {
                                  "sub name" : "IS",
1510
1511
                                   "score" : 72
1512
                         },
1513
                          {
1514
                                  "sub name" : "TOC",
                                  "score" : 75
1516
                          }
1517
1518
                 "Area_of_Interest" : [
                          \overline{\text{"}}Networking",
1519
                          "DWDM",
1520
                          "OS"
1521
1522
                 ]
1523
       }
1524
1525
1526
1527
1528
       Query using or operation
1529
       > db.Student.find(($or:[{Panel:"E"}, {Panel:"A"}]}).pretty()
1530
1531
                 " id" : ObjectId("60bb5715ae0512016f998c3f"),
                 "\overline{S} id" : "S111",
1532
                 "S name" : "James Smith",
1533
1534
                 "Branch" : "Mech",
1535
                 "Age" : 22,
                 "Panel" : "E",
1536
                 "Address" : {
1537
                         "Area" : "Hadapsar",
1538
                          "Pincode" : 412312
1539
1540
1541
                 "Subjects" : [
1542
                          {
1543
                                  "sub name" : "TOC",
1544
                                  "score" : 81
1545
                          }
1546
                 ],
1547
                 "Area of Interest" : [
1548
                          "DBMS",
                          "Networking",
1549
1550
                          "NLP"
1551
                 ]
1552
1553
1554
                 " id" : ObjectId("60bb5739ae0512016f998c40"),
1555
                 "\overline{S} id" : "S112",
1556
                 "S name" : "Michael Smith",
1557
                 "Branch" : "CSE",
1558
                 "Age" : 20,
1559
                 "Panel" : "E",
                 "Address" : {
1560
1561
                         "Area" : "ShivTirth",
                          "City" : "Pune",
1562
                         "Pincode" : 412301
1563
1564
                 },
1565
                 "Subjects" : [
1566
                          {
1567
                                  "sub name" : "DBMS",
1568
                                  "score": 81
1569
                         },
1570
                          {
1571
                                  "sub name" : "IS",
                                  "score" : 83
1572
1573
                         }
```

```
1574
                ],
1575
                "Area of Interest" : [
                         "DBMS",
1576
1577
                         "AI",
                         "ML"
1578
1579
                ]
1580
       }
1581
       {
                " id" : ObjectId("60bb5739ae0512016f998c41"),
1582
                "\overline{S} id" : "S113",
1583
                "S name" : "Robert Smith",
1584
1585
                "Branch" : "ECE",
                "Age" : 21,
1586
                "Panel" : "A",
1587
                "Address" : {
1588
                         "Area" : "Swargate",
1589
                         "City": "Pune",
1590
1591
                         "Pincode" : 412303
1592
1593
                "Subjects" : [
1594
                         {
1595
                                  "sub name" : "AI",
1596
                                  "score" : 79
1597
                         },
1598
                         {
1599
                                  "sub name" : "TOC",
1600
                                  "score" : 80
1601
                         }
1602
                ],
1603
                "Area of Interest" : [
1604
                         "DBMS",
1605
                         "AI",
                         "ML",
1606
1607
                         "Networking"
1608
                ]
1609
       }
1610
1611
                " id" : ObjectId("60bb5739ae0512016f998c42"),
1612
                "S_id" : "S114",
1613
                "S_name" : "Maria Garcia",
1614
                "Branch" : "MECH",
                "Age" : 21,
1615
                "Panel" : "A",
1616
1617
                "Address" : {
                         "Area" : "Shivajinagar",
1618
                         "City" : "Pune",
1619
                         "Pincode" : 412307
1620
1621
                "Subjects" : [
1622
1623
                         {
1624
                                  "sub name" : "IS",
1625
                                  "score" : 90
1626
                         },
1627
                         {
1628
                                  "sub name" : "AI",
1629
                                  "score": 82
1630
                         }
1631
                "Area of Interest" : [
1632
                         "DBMS",
1633
1634
                         "Networking"
1635
                ]
1636
       }
1637
                " id" : ObjectId("60bb5739ae0512016f998c43"),
1638
                "\bar{S} id" : "S115",
1639
1640
                "S name" : "David Smith",
                "Branch" : "ECE",
1641
1642
                "Age" : 20,
```

```
1643
                "Panel" : "A",
1644
                "Address" : {
                         "Area" : "Kothrud",
1645
                         "City" : "Pune",
1646
                         "Pincode" : 412300
1647
1648
1649
                "Subjects" : [
1650
                         {
1651
                                  "sub name" : "TOC",
                                  "score" : 78
1652
                         },
1653
1654
                         {
1655
                                  "sub name" : "AI",
                                  "score" : 80
1656
1657
                         }
1658
1659
                "Area of Interest" : [
1660
                         "AI",
1661
                         "DS"
1662
                ]
1663
       }
1664
1665
                " id" : ObjectId("60bb5739ae0512016f998c44"),
                "S_id" : "S116",
"S_name" : "Maria Rodriguez",
1666
1667
                "Branch" : "CSE",
1668
                "Age" : 21,
1669
                "Panel" : "A",
1670
1671
                "Address" : {
1672
                         "Area" : "Sangamvadi",
                         "City" : "Pune",
1673
1674
                         "Pincode" : 412311
1675
1676
                "Subjects" : [
1677
                         {
1678
                                  "sub name" : "IS",
1679
                                  "score" : 72
1680
                         },
1681
                         {
1682
                                  "sub name" : "TOC",
1683
                                  "score" : 75
                         }
1684
1685
                "Area of Interest" : [
                         "Networking",
1687
1688
                         "DWDM",
1689
                         "OS"
1690
1691
       }
1692
1693
                " id" : ObjectId("60bb5739ae0512016f998c46"),
1694
                "S id" : "S118",
1695
                "S name" : "Maria Hernandez",
1696
                "Branch" : "Mech",
1697
                "Age" : 21,
                "Panel" : "E",
1698
1699
                "Address" : {
                         "Area" : "Swargate",
1700
                         "City" : "Pune",
1701
                         "Pincode" : 412303
1702
1703
1704
                "Subjects" : [
1705
                         {
1706
                                  "sub name" : "TOC",
1707
                                  "score" : 93
1708
                         },
1709
                         {
1710
                                  "sub name" : "AI",
1711
                                  "score" : 91
```

```
1712
                         }
1713
                ],
1714
                 "Area_of_Interest" : [
                         "DBMS",
1715
1716
                          "Web Dev"
1717
                ]
1718
       }
1719
       {
                " id" : ObjectId("60bb5830f5322caf711ed8b1"),
1720
                "S id" : "S121",
1721
1722
                "Branch" : "CSE",
1723
                "Panel" : "A"
1724
       }
1725
1726
1727
1728
       Display only two documents
1729
       > db.Student.find().pretty().limit(2)
1730
1731
                 " id" : ObjectId("60bb5715ae0512016f998c3f"),
                "\overline{S} id" : "S111",
1732
1733
                "S name" : "James Smith",
1734
                "Branch" : "Mech",
1735
                "Age" : 22,
1736
                "Panel" : "E",
                 "Address" : {
1737
                         "Area": "Hadapsar",
1738
                         "Pincode" : 412312
1739
1740
1741
                 "Subjects" : [
1742
                          {
1743
                                  "sub name" : "TOC",
                                  "score" : 81
1744
1745
                         }
1746
1747
                 "Area of Interest" : [
                         \overline{\ }DBMS",
1748
1749
                          "Networking",
1750
                         "NLP"
1751
                ]
1752
       }
1753
       {
                " id" : ObjectId("60bb5739ae0512016f998c40"),
1754
                "\overline{S} id" : "S112",
1755
                "S name" : "Michael Smith",
1756
                "Branch" : "CSE",
1757
1758
                "Age" : 20,
                "Panel" : "E",
1759
                 "Address" : {
1760
                         "Area" : "ShivTirth",
1761
                         "City" : "Pune",
1762
1763
                         "Pincode" : 412301
1764
1765
                 "Subjects" : [
1766
                          {
1767
                                  "sub name" : "DBMS",
                                  "score" : 81
1768
1769
                         },
1770
                          {
1771
                                  "sub name" : "IS",
1772
                                  "score": 83
1773
                          }
1774
1775
                 "Area of Interest" : [
                         "DBMS",
1776
                         "AI",
1777
1778
                         "ML"
1779
                ]
1780
```

```
1782
1783
1784
       Query using all operation
1785
       > db.Student.find({Area of Interest:{$all:["DBMS","ML"]}}).pretty()
1786
                " id" : ObjectId("60bb5739ae0512016f998c40"),
1787
                \overline{S} id" : "S112",
1788
                "S name" : "Michael Smith",
1789
                "Branch" : "CSE",
1790
1791
                "Age" : 20,
1792
                "Panel" : "E",
                "Address" : {
1793
1794
                         "Area" : "ShivTirth",
                         "City" : "Pune",
1795
                         "Pincode" : 412301
1796
1797
                },
1798
                "Subjects" : [
1799
                         {
1800
                                  "sub name" : "DBMS",
1801
                                  "score" : 81
1802
                         },
1803
                         {
                                  "sub name" : "IS",
1804
                                  "score": 83
1805
1806
                         }
1807
1808
                "Area of Interest" : [
                         "DBMS",
1809
1810
                         "AI",
                         "ML"
1811
1812
                ]
1813
       }
1814
                " id" : ObjectId("60bb5739ae0512016f998c41"),
1815
                "\bar{S} id" : "S113",
1816
1817
                "S name": "Robert Smith",
1818
                "Branch" : "ECE",
1819
                "Age" : 21,
                "Panel" : "A",
1820
1821
                "Address" : {
1822
                         "Area" : "Swargate",
1823
                         "City" : "Pune",
1824
                         "Pincode" : 412303
1825
                "Subjects" : [
1826
1827
                         {
1828
                                  "sub name" : "AI",
                                  "score" : 79
1829
1830
                         },
1831
                         {
1832
                                  "sub name" : "TOC",
1833
                                  "score": 80
1834
                         }
1836
                "Area of Interest" : [
                         "DBMS",
1837
1838
                         "AI",
                         "ML",
1839
                         "Networking"
1840
1841
                ]
1842
       }
1843
1844
1845
1846
1847
1848
```

1849

1781

1850 > db.Customer.drop()
1851 true
1852
1853

```
1
     Exe B Lab assi 1
2
3
4
5
     Create database Company
 6
    > use Company
7
    switched to db Company
8
9
10
    Create collection Customer.
11
    > db.createCollection("Customer")
12
     { "ok" : 1 }
13
14
15
     Insert 10 documents
16
     > db.Customer.insert({
17
     ... firstName: "James", lastName: "Smith", age: 20,
     ... Address:{streetAddress:"777 Brockton
18
     Avenue", city: "Abington", state: "MA", postalCode: 2351},
19
     ... phoneNumber:[{type:"home",number:4661632082},{type:"fax",number:2899829351}],
20
     ... emailAddress:["jamesS@gamil.com","SJames@gmail.com"]
21
22
    WriteResult({ "nInserted" : 1 })
23
24
25
    > db.Customer.find().pretty()
26
27
              " id" : ObjectId("60bb5b6bd5ec118047011dd3"),
28
             "firstName" : "James",
29
             "lastName" : "Smith",
             "age" : 20,
30
31
              "Address" : {
32
                      "streetAddress": "777 Brockton Avenue",
33
                      "city": "Abington",
                      "state" : "MA",
34
35
                      "postalCode" : 2351
36
37
              "phoneNumber" : [
38
                      {
                               "type" : "home",
39
                               "number" : 4661632082
40
41
                      },
42
                      {
43
                               "type" : "fax",
44
                               "number" : 2899829351
45
                      }
46
              "emailAddress" : [
47
48
                      "jamesS@gamil.com",
49
                      "SJames@gmail.com"
50
             ]
51
     }
52
     >
53
    >
54
55
     > db.Customer.insertMany([
56
     ... {firstName: "Michael", lastName: "Smith", age:21,
57
     ... Address: {streetAddress: "279 Troy Road", city: "East
     Greenbush", state:"NY", postalCode:12061},
     ... phoneNumber:[{type:"home",number:9808191199},{type:"fax",number:7797374941}],
58
59
     ... emailAddress:["MichS@gamil.com", "SMich@gmail.com"]},
60
     ... {firstName: "Robert", lastName: "Smith", age: 22,
61
     ... Address:{streetAddress:"1400 Farmington
     Ave", city: "Bristol", state: "CT", postalCode: 6010},
62
     ... phoneNumber:[{type:"home",number:1761266808}, {type:"fax",number:9841911399}],
     ... emailAddress:["Robert@gamil.com", "SRob@gmail.com"]},
     ... {firstName: "Maria", lastName: "Garcia", age: 22,
64
     ... Address:{streetAddress:"515 Sawmill Road",city:"West
65
     Haven", state: "CT", postalCode: 6516},
```

```
... phoneNumber:[{type:"home",number:8215484894},{type:"fax",number:6754261777}],
 67
      ... emailAddress:["MariaG@gamil.com", "GMaria@gmail.com"]},
 68
      ... {firstName: "David", lastName: "Smith", age: 21,
 69
      ... Address: {streetAddress: "30 Memorial Drive", city: "Avon", state: "MA", postalCode: 2322},
 70
      ... phoneNumber:[{type:"home",number:1508518145},{type:"fax",number:6778131732}],
 71
      ... emailAddress:["David@gamil.com", "SDavid@gmail.com"]},
 72
      ... {firstName: "Maria", lastName: "Rodriguez", age: 20,
 73
      ... Address:{streetAddress:"100 Thruway
      Plaza", city: "Cheektowaga", state: "NY", postalCode: 14225},
      ... phoneNumber: [{type:"home", number: 2870577148}, {type:"fax", number: 1700918899}],
 74
 75
      ... emailAddress:["MariaR@gamil.com","RMaria@gmail.com"]},
      ... {firstName: "Mary", lastName: "Smith", age: 22,
 76
      ... Address: {streetAddress: "180 River Rd", city: "Lisbon", state: "CT", postalCode: 6351},
 77
 78
      ... phoneNumber:[{type:"home",number:9806068527},{type:"fax",number:3219935317}],
 79
      ... emailAddress:["Mary@gamil.com", "SMary@gmail.com"]},
 80
      ... {firstName: "Maria", lastName: "Hernandez", age: 21,
      ... Address: { streetAddress: "540 West
 81
      Bypass",city:"Andalusia",state:"AL",postalCode:36420},
      ... phoneNumber: [{type:"home", number: 7655200366}, {type:"fax", number: 0481572451}],
 82
 83
      ... emailAddress:["MariaH@gamil.com","HMaria@gmail.com"]},
 84
      ... {firstName: "Lilly", lastName: "Martinez", age: 22,
      ... Address: {streetAddress: "591 Memorial Dr", city: "Chicopee", state: "MA", postalCode: 1020},
 86
      ... phoneNumber: [{type:"home", number:1723748378}, {type:"fax", number:3294228998 }],
 87
      ... emailAddress:["Lilly@gamil.com", "MLilly@gmail.com"]},
      ... {firstName:"James", lastName:"Johnson", age:20,
 88
      ... Address: {streetAddress: "30 Catskill", city: "Catskill", state: "NY", postalCode: 12414},
 89
 90
      ... phoneNumber:[{type:"home",number:8602583403},{type:"fax",number:2270838423}],
 91
      ... emailAddress:["JJames@gamil.com","JohnJames@gmail.com"]},
 92
      ... {firstName: "Kamilah", lastName: "Earhart", age: 32,
 93
      ... Address: {streetAddress: "297 Grant Avenue", city: "Auburn", state: "NY", postalCode: 13021},
 94
      ... phoneNumber:[{type:"home",number:7360386487},{type:"fax",number:8330942524}],
 95
      ... emailAddress:["Kamilah@gamil.com", "EKamlish@gmail.com", "KamilahEar@gmail,com"]},
      ... {firstName: "Alise", lastName: "Pickrell", age: 29,
      ... Address:{streetAddress:"4133 Veterans
      Memorial", city: "Batavia", state: "NY", postalCode: 14020},
 98
      phoneNumber: [{type:"home", number: 8564397599}, {type:"fax", number: 5426189495}, {type: "Mobile
      ", number: 3314579129}],
      ... emailAddress:["AliseP@gamil.com","PAlise@gmail.com"]},
 99
100
      ... {firstName:"Leticia", lastName:"Wrobel", age:33,
101
      ... Address: {streetAddress: "337 Russell St", city: "Hadley", state: "MA", postalCode: 1035},
102
      phoneNumber: [{type:"home", number:1659846658}, {type:"fax", number:3502899930}, {type:"Mobile
      ", number: 8437087134}],
      ... emailAddress:["Leticia@gamil.com", "WLeticia@gmail.com", "WrobelL@gmail,com"]},
103
104
      ... {firstName: "Caridad", lastName: "Kendall", age: 34,
105
      ... Address: {streetAddress: "6265
      Brockport",city:"Brockport",state:"NY",postalCode:14420},
106
      ... phoneNumber:[{type:"home",number:8602583403},{type:"fax",number:4326828684}],
107
      ... emailAddress:["Caridad@gamil.com","CaridadK@gmail.com"]},
108
      ... {firstName: "Michele", lastName: "Gault", age:36,
109
      ... Address:{streetAddress:"5399 W Genesse
      St", city: "Camillus", state: "NY", postalCode: 13031},
110
      phoneNumber: [{type:"home", number: 6125582162}, {type:"fax", number: 0935992552}, {type:"Mobile
      ", number: 0395710776}],
111
      ... emailAddress:["MichaelG@gamil.com", "GMichele@gmail.com", "GaultM@gmail,com"]},
112
      ... {firstName:"Azalee",lastName:"Racey",age:31,
113
      ... Address:{streetAddress:"3191 County rd
      10", city: "Canandaigua", state: "NY", postalCode: 14424},
114
      phoneNumber: [{type:"home", number: 8268801323}, {type:"fax", number: 9568588641}, {type: "Mobile
      ", number: 7806366159}],
      ... emailAddress:["AzaleeR@gamil.com","RAzalee@gmail.com"]},
115
      ... {firstName: "Kathlyn", lastName: "Hackenberg", age: 31,
116
      ... Address: {streetAddress: "20 Soojian Dr", city: "Leicester", state: "MA", postalCode: 1524},
      ... phoneNumber:[{type:"home",number:4131667434},{type:"fax",number:4051166104}],
118
119
      ... emailAddress:["Kathlyn@gamil.com","HKathlyn@gmail.com"]},
      ... {firstName:"Edie", lastName: "Burstein", age:38,
120
```

```
... Address: {streetAddress: "30 Catskill", city: "Catskill", state: "NY", postalCode: 12414},
122
      ... phoneNumber:[{type:"home",number:2601886547},{type:"fax",number:2999933858}],
123
      ... emailAddress:["Edie@gamil.com","BEdie@gmail.com","BursteinE@gmail,com"]},
124
      ... {firstName:"Will",lastName:"Strout",age:36,
125
      ... Address: {streetAddress: "11 Jungle
      Road",city:"Leominster",state:"MA",postalCode:1453},
126
      phoneNumber: [{type: "home", number: 0976463661}, {type: "fax", number: 8685337904}, {type: "Mobile
      ", number: 9809039510}],
      ... emailAddress:["Will@gamil.com","SWill@gmail.com"]},
127
      ... {firstName: "Cesar", lastName: "Bannon", age: 34,
128
      ... Address:{streetAddress:"161 Centereach
129
      Mall", city: "Centereach", state: "NY", postalCode: 11720},
130
      phoneNumber: [{type:"home", number: 8803053048}, {type:"fax", number: 8337163141}, {type:"Mobile
      ", number: 9735653616}],
      ... emailAddress:["Cesar@gamil.com", "BCesar@gmail.com"]},
131
132
      ... {firstName: "Hanna", lastName: "Voliva", age: 30,
      ... Address: {streetAddress: "780 Lynnway", city: "Lynn", state: "MA", postalCode: 1905},
133
134
      ... phoneNumber:[{type:"home",number:4041954879},{type:"fax",number:2490539545}],
      ... emailAddress: ["Hanna@gamil.com", "VHanna@gmail.com", "VolivaHanna@gmail,com"]},
135
136
      ... {firstName: "Yuonne", lastName: "Gingerich", age: 22,
137
      ... Address:{streetAddress:"3018 East Ave",city:"Central
      Square", state: "NY", postalCode: 13036},
138
      phoneNumber: [{type:"home", number:2990731778}, {type:"fax", number:4631531140}, {type:"Mobile
      ", number: 8829936546}],
      ... emailAddress:["Yuonne@gamil.com","GYuonne@gmail.com"]},
139
140
      ... {firstName: "Jackie", lastName: "Wolfenbarger", age: 22,
      ... Address:{streetAddress:"100 Thruway
1 4 1
      Plaza", city: "Cheektowaga", state: "NY", postalCode: 14225},
142
      ... phoneNumber: [{type:"home", number: 6822716568}, {type:"fax", number: 7965807774}],
143
      ... emailAddress:["Jackie@gamil.com","WJackie@gmail.com"]},
144
      ...]);
145
146
               "acknowledged" : true,
147
               "insertedIds" : [
                       ObjectId("60bb5b87d5ec118047011dd4"),
148
149
                       ObjectId("60bb5b87d5ec118047011dd5"),
150
                       ObjectId("60bb5b87d5ec118047011dd6"),
151
                       ObjectId("60bb5b87d5ec118047011dd7"),
152
                       ObjectId("60bb5b87d5ec118047011dd8"),
153
                       ObjectId("60bb5b87d5ec118047011dd9"),
154
                       ObjectId("60bb5b87d5ec118047011dda"),
155
                       ObjectId("60bb5b87d5ec118047011ddb"),
156
                       ObjectId("60bb5b87d5ec118047011ddc"),
157
                       ObjectId("60bb5b87d5ec118047011ddd"),
158
                       ObjectId("60bb5b87d5ec118047011dde"),
159
                       ObjectId("60bb5b87d5ec118047011ddf"),
160
                       ObjectId("60bb5b87d5ec118047011de0"),
161
                       ObjectId("60bb5b87d5ec118047011de1"),
162
                       ObjectId("60bb5b87d5ec118047011de2"),
163
                       ObjectId("60bb5b87d5ec118047011de3"),
164
                       ObjectId("60bb5b87d5ec118047011de4"),
                       ObjectId("60bb5b87d5ec118047011de5"),
165
166
                       ObjectId("60bb5b87d5ec118047011de6"),
167
                       ObjectId("60bb5b87d5ec118047011de7"),
168
                       ObjectId("60bb5b87d5ec118047011de8"),
169
                       ObjectId("60bb5b87d5ec118047011de9")
170
               ]
171
      }
172
      >
173
      >
174
175
      > db.Customer.find({lastName:"Smith"}).pretty().limit(1)
176
177
               " id" : ObjectId("60bb5b6bd5ec118047011dd3"),
178
               "firstName" : "James",
               "lastName" : "Smith",
179
```

```
"age" : 20,
180
181
               "Address" : {
182
                       "streetAddress": "777 Brockton Avenue",
                       "city" : "Abington",
"state" : "MA",
183
184
185
                       "postalCode" : 2351
186
187
               "phoneNumber" : [
188
                        {
189
                                "type" : "home",
190
                                "number" : 4661632082
191
                       },
192
                        {
                                "type" : "fax",
193
                                "number": 2899829351
194
195
                        }
196
               ],
197
               "emailAddress" : [
198
                       "jamesS@gamil.com",
199
                       "SJames@gmail.com"
200
               ]
201
202
203
204
      Increment Age by 2
205
      > db.Customer.update({lastName:"Smith"}, {$inc:{age:2}});
206
      WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
207
208
      > db.Customer.find({lastName:"Smith"}).pretty().limit(1)
209
210
               " id" : ObjectId("60bb5b6bd5ec118047011dd3"),
               "firstName" : "James",
211
               "lastName" : "Smith",
212
               "age" : 22,
213
               "Address" : {
214
215
                       "streetAddress": "777 Brockton Avenue",
216
                       "city": "Abington",
                       "state" : "MA",
217
218
                       "postalCode" : 2351
219
               },
220
               "phoneNumber" : [
221
                       {
222
                                "type" : "home",
223
                                "number" : 4661632082
224
                       },
225
                        {
226
                                "type" : "fax",
                                "number": 2899829351
227
228
229
               ],
               "emailAddress" : [
230
231
                       "jamesS@gamil.com",
232
                       "SJames@gmail.com"
233
               ]
234
      }
235
236
237
238
      Push emailAddress
239
      > db.Customer.find({firstName:"Lilly"}).pretty().limit(1)
240
241
               " id" : ObjectId("60bb5b87d5ec118047011ddb"),
242
               "firstName" : "Lilly",
               "lastName" : "Martinez",
243
               "age" : 22,
244
245
               "Address" : {
                       "streetAddress" : "591 Memorial Dr",
246
247
                       "city" : "Chicopee",
                       "state" : "MA",
248
```

```
249
                       "postalCode" : 1020
250
251
               "phoneNumber" : [
252
                       {
253
                                "type" : "home",
                                "number" : 1723748378
254
255
                       },
256
                       {
257
                                "type" : "fax",
                                "number": 3294228998
258
259
                       }
               ],
260
261
               "emailAddress" : [
                       "Lilly@gamil.com",
262
263
                       "MLilly@gmail.com"
264
               1
265
      }
266
      db.Customer.update({firstName:"Lilly"}, {$push:{emailAddress:{$each:["LillyM@gmail.com"]}}
267
      ... ^C
268
269
270
      db.Customer.update({firstName:"Lilly"}, {$push:{emailAddress:{$each:["LillyM@gmail.com"]}}}
271
      WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
272
273
      > db.Customer.find({firstName:"Lilly"}).pretty().limit(1)
274
275
               " id" : ObjectId("60bb5b87d5ec118047011ddb"),
               "firstName" : "Lilly",
276
277
               "lastName" : "Martinez",
               "age" : 22,
278
               "Address" : {
279
280
                       "streetAddress": "591 Memorial Dr",
281
                       "city" : "Chicopee",
                       "state" : "MA",
282
283
                       "postalCode" : 1020
284
285
               "phoneNumber" : [
286
                       {
287
                                "type" : "home",
288
                                "number" : 1723748378
289
                       },
290
                       {
291
                                "type" : "fax",
                                "number": 3294228998
292
293
                       }
294
               ],
295
               "emailAddress" : [
296
                       "Lilly@gamil.com",
297
                       "MLilly@gmail.com",
298
                       "LillyM@gmail.com"
299
               ]
300
      }
301
302
303
304
      pop emailAddress
305
      > db.Customer.find({firstName:"James"}).pretty().limit(1)
306
307
               " id" : ObjectId("60bb5b6bd5ec118047011dd3"),
308
               "firstName" : "James",
               "lastName" : "Smith",
309
               "age" : 22,
310
311
               "Address" : {
312
                       "streetAddress": "777 Brockton Avenue",
313
                       "city" : "Abington",
                       "state" : "MA",
314
```

```
315
                       "postalCode" : 2351
316
317
               "phoneNumber" : [
318
319
                                "type" : "home",
                                "number" : 4661632082
320
321
                       },
322
                       {
323
                                "type" : "fax",
                                "number" : 2899829351
324
325
                       }
326
               ],
               "emailAddress" : [
327
328
                       "jamesS@gamil.com",
329
                       "SJames@gmail.com"
330
               1
331
332
      > db.Customer.update({firstName:"James"},{$pop:{emailAddress:-1}})
333
      WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
334
      > db.Customer.find({firstName:"James"}).pretty().limit(1)
335
336
               " id" : ObjectId("60bb5b6bd5ec118047011dd3"),
337
               "firstName" : "James",
               "lastName" : "Smith",
338
               "age" : 22,
339
               "Address" : {
340
341
                       "streetAddress": "777 Brockton Avenue",
342
                       "city" : "Abington",
                       "state" : "MA",
343
344
                       "postalCode" : 2351
345
               "phoneNumber" : [
346
347
                       {
                                "type" : "home",
348
                                "number" : 4661632082
349
350
                       },
351
                       {
352
                                "type" : "fax",
353
                                "number" : 2899829351
354
                       }
355
356
               "emailAddress" : [
357
                       "SJames@gmail.com"
358
               1
359
      }
360
361
362
363
      Update record
364
      > db.Customer.find({lastName:"Hernandez"}).pretty().limit(1)
365
               " id" : ObjectId("60bb5b87d5ec118047011dda"),
366
367
               "firstName" : "Maria",
368
               "lastName" : "Hernandez",
369
               "age" : 21,
370
               "Address" : {
371
                       "streetAddress": "540 West Bypass",
372
                       "city" : "Andalusia",
                       "state" : "AL",
373
374
                       "postalCode" : 36420
375
               "phoneNumber" : [
376
377
                       {
                                "type" : "home",
378
379
                                "number" : 7655200366
                       },
380
381
                       {
382
                                "type" : "fax",
                                "number" : 481572451
383
```

```
384
                       }
385
               ],
386
               "emailAddress" : [
387
                       "MariaH@gamil.com",
388
                       "HMaria@gmail.com"
389
               1
390
      > db.Customer.update({lastName:"Hernandez"}, {$set:{Address:{state:"CT",Pincode:4123}}})
391
392
      WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
393
      > db.Customer.find({lastName:"Hernandez"}).pretty().limit(1)
394
395
               " id" : ObjectId("60bb5b87d5ec118047011dda"),
396
               "firstName" : "Maria",
               "lastName" : "Hernandez",
397
398
               "age" : 21,
399
               "Address" : {
                       "state" : "CT",
400
401
                       "Pincode" : 4123
402
               },
403
               "phoneNumber" : [
404
                       {
405
                                "type" : "home",
406
                                "number" : 7655200366
407
                       },
408
                       {
                                "type" : "fax",
409
                                "number" : 481572451
410
411
                       }
412
               ],
               "emailAddress" : [
413
414
                       "MariaH@gamil.com",
415
                       "HMaria@gmail.com"
416
               1
417
418
      >
419
420
      >
421
      >
422
423
      > db.Customer.find({lastName:"Smith"}).pretty().limit(1)
424
425
               " id" : ObjectId("60bb5b6bd5ec118047011dd3"),
               "firstName" : "James",
426
427
               "lastName" : "Smith",
               "age" : 22,
428
429
               "Address" : {
430
                       "streetAddress": "777 Brockton Avenue",
431
                       "city" : "Abington",
                       "state" : "MA",
432
433
                       "postalCode" : 2351
434
               "phoneNumber" : [
435
436
                       {
437
                                "type" : "home",
438
                                "number" : 4661632082
439
                       },
440
                       {
441
                                "type" : "fax",
                                "number": 2899829351
442
443
444
               ],
445
               "emailAddress" : [
446
                       "SJames@gmail.com"
447
               ]
448
449
      > db.Customer.update({lastName:"Smith"}, {$set:{age:23}})
450
      WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
451
      > db.Customer.find({lastName:"Smith"}).pretty().limit(1)
452
```

```
453
              " id" : ObjectId("60bb5b6bd5ec118047011dd3"),
454
              "firstName" : "James",
455
              "lastName" : "Smith",
              "age" : 23,
456
457
              "Address" : {
458
                      "streetAddress": "777 Brockton Avenue",
459
                      "city" : "Abington",
                      "state" : "MA",
460
461
                      "postalCode" : 2351
462
463
              "phoneNumber" : [
464
                       {
                               "type" : "home",
465
                               "number" : 4661632082
466
467
                      },
468
                       {
469
                               "type" : "fax",
470
                               "number" : 2899829351
471
                       }
472
473
              "emailAddress" : [
474
                      "SJames@gmail.com"
475
              1
476
      }
477
478
479
480
481
     Update with upsert
482
483
     > db.Customer.find({firstName:"Vasu"}).pretty().limit(1)
484
485
     > db.Customer.update({firstName:"Vasu"}, {$set:{lastName:"Kalariya"}}, {upsert:true})
      WriteResult({
486
487
              "nMatched" : 0,
488
              "nUpserted" : 1,
              "nModified" : 0,
489
490
              " id" : ObjectId("60bb5d9af5322caf711ed97f")
491
      })
492
      >
493
      > db.Customer.find({firstName:"Vasu"}).pretty().limit(1)
494
495
              " id" : ObjectId("60bb5d9af5322caf711ed97f"),
496
              "firstName" : "Vasu",
497
              "lastName" : "Kalariya"
498
499
      >
500
      >
501
      >
502
503
504
      > db.Customer.remove({firstName:"James"})
505
     WriteResult({ "nRemoved" : 2 })
506
507
     > db.Customer.find({firstName:"James"}).pretty()
508
509
510
      > db.Customer.find({"age":{$gte:22}})
      { "id": ObjectId("60bb5b87d5ec118047011dd5"), "firstName": "Robert", "lastName":
511
      "Smith", "age" : 22, "Address" : { "streetAddress" : "1400 Farmington Ave", "city" :
      "Bristol", "state": "CT", "postalCode": 6010 }, "phoneNumber": [ { "type": "home",
      "number" : 1761266808 }, { "type" : "fax", "number" : 9841911399 } ], "emailAddress" :
      [ "Robert@gamil.com", "SRob@gmail.com" ] }
512
      { " id" : ObjectId("60bb5b87d5ec118047011dd6"), "firstName" : "Maria", "lastName" :
      "Garcia", "age" : 22, "Address" : { "streetAddress" : "515 Sawmill Road", "city" :
      "West Haven", "state" : "CT", "postalCode" : 6516 }, "phoneNumber" : [ { "type" :
      "home", "number" : 8215484894 }, { "type" : "fax", "number" : 6754261777 } ],
      "emailAddress" : [ "MariaG@gamil.com", "GMaria@gmail.com" ] }
513
      { " id" : ObjectId("60bb5b87d5ec118047011dd9"), "firstName" : "Mary", "lastName" :
```

```
"Smith", "age" : 22, "Address" : { "streetAddress" : "180 River Rd", "city" : "Lisbon",
      "state": "CT", "postalCode": 6351 }, "phoneNumber": [ { "type": "home", "number":
      9806068527 }, { "type" : "fax", "number" : 3219935317 } ], "emailAddress" : [
      "Mary@gamil.com", "SMary@gmail.com" ] }
      { " id" : ObjectId("60bb5b87d5ec118047011ddb"), "firstName" : "Lilly", "lastName" :
      "Martinez", "age" : 22, "Address" : { "streetAddress" : "591 Memorial Dr", "city" : "Chicopee", "state" : "MA", "postalCode" : 1020 }, "phoneNumber" : [ { "type" : "home",
      "number": 1723748378 }, { "type": "fax", "number": 3294228998 } ], "emailAddress":
      [ "Lilly@gamil.com", "MLilly@gmail.com", "LillyM@gmail.com" ] }
515
      { "id": ObjectId("60bb5b87d5ec118047011ddd"), "firstName": "Kamilah", "lastName":
      "Earhart", "age" : 32, "Address" : { "streetAddress" : "297 Grant Avenue", "city" :
      "Auburn", "state" : "NY", "postalCode" : 13021 }, "phoneNumber" : [ { "type" : "home",
      "number": 7360386487 }, { "type": "fax", "number": 8330942524 } ], "emailAddress":
      [ "Kamilah@gamil.com", "EKamlish@gmail.com", "KamilahEar@gmail,com" ] }
      { " id" : ObjectId("60bb5b87d5ec118047011dde"), "firstName" : "Alise", "lastName" :
516
      "Pickrell", "age" : 29, "Address" : { "streetAddress" : "4133 Veterans Memorial",
      "city": "Batavia", "state": "NY", "postalCode": 14020 }, "phoneNumber": [{ "type"
      : "home", "number" : 8564397599 }, { "type" : "fax", "number" : 5426189495 }, { "type"
      : "Mobile", "number" : 3314579129 } ], "emailAddress" : [ "AliseP@gamil.com",
      "PAlise@gmail.com" ] }
      { "_id" : ObjectId("60bb5b87d5ec118047011ddf"), "firstName" : "Leticia", "lastName" :
517
      "Wrobel", "age" : 33, "Address" : { "streetAddress" : "337 Russell St", "city" :
      "Hadley", "state" : "MA", "postalCode" : 1035 }, "phoneNumber" : [ { "type" : "home",
      "number": 1659846658 }, { "type": "fax", "number": 3502899930 }, { "type":
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518
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520
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521
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      "SWill@gmail.com" ] }
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524
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      "BCesar@gmail.com" ] }
      { " id" : ObjectId("60bb5b87d5ec118047011de7"), "firstName" : "Hanna", "lastName" :
      "Voliva", "age" : 30, "Address" : { "streetAddress" : "780 Lynnway", "city" : "Lynn",
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"Hanna@gamil.com", "VHanna@gmail.com", "VolivaHanna@gmail,com" ] }
526
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527
             { " id" : ObjectId("60bb5b87d5ec118047011de9"), "firstName" : "Jackie", "lastName" :
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528
529
530
531
             Use $qt, $ate, $lt
532
533
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534
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550
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556
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557
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558
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562
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569
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571
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577
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578
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581
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582
583
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584
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585
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586
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587
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588
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589
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590
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591
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594
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597
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598
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599
600
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601
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603
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604
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605
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606
607
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608
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613
614
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615
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616
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617
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618
619
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620
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621
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622
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623
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629
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632
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638
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639
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640
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641
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642
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645
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646
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647
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648
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650
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652
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653
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655
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656
657
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658
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671
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673
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674
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675
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676
                        "GaultM@gmail,com"
677
               ]
678
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679
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682
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683
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687
688
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689
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697
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701
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703
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704
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705
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707
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708
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715
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722
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736
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756
757
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759
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760
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761
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762
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763
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769
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774
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775
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776
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779
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782
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783
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784
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785
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786
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787
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788
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789
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790
               ]
791
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792
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793
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795
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796
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798
799
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800
801
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820
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821
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824
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845
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847
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848
849
      >
850
      >
851
      >
852
      >
853
      >
854
855
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856
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860
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863
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866
               },
867
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868
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869
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870
                        },
871
872
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873
                                 "type" : "fax",
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874
875
                        }
876
               ],
877
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                        "MichS@gamil.com",
878
879
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880
               ]
881
      }
882
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884
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889
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892
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895
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898
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900
901
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902
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903
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904
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905
                        "SDavid@gmail.com"
906
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907
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910
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914
915
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916
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918
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919
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921
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927
                        }
928
929
               "emailAddress" : [
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930
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931
                        "RMaria@gmail.com"
932
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933
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940
941
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942
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948
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949
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952
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953
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954
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955
                        "HMaria@gmail.com"
956
               ]
957
      }
958
959
960
961
962
      Record starting with N
963
      > db.Customer.find({"Address.state":{$regex:/^N/}}).pretty()
964
965
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966
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968
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969
970
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971
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972
                        "state" : "NY",
973
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974
975
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979
                        },
980
                        {
981
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982
                                 "number" : 7797374941
983
                        }
984
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985
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986
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987
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988
               ]
989
      }
990
      {
991
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993
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994
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997
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998
                        "state" : "NY",
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```
999
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1000
1001
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1004
1005
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1006
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1007
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                                  "number" : 1700918899
1008
1009
                         }
1010
                ],
1011
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1012
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1013
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1014
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1015
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1016
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1017
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1018
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1019
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1020
1021
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1022
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1023
1024
1025
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1026
1027
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1029
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1031
                         },
1032
                         {
1033
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                                  "number": 8330942524
1034
1035
                         }
1036
                ],
1037
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1038
                         "Kamilah@gamil.com",
1039
                         "EKamlish@gmail.com",
1040
                         "KamilahEar@gmail,com"
1041
                ]
1042
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1043
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1045
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                "lastName" : "Pickrell",
1046
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1048
1049
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1050
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                         "state" : "NY",
1051
1052
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1053
1054
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1056
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1057
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1059
                         {
1060
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1061
                                  "number" : 5426189495
1062
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1063
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1064
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1066
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1067
                ],
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1068
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1070
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1071
                ]
1072
1073
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1077
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1079
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                        "state" : "NY",
1081
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1086
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1087
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1090
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1091
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1093
1094
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1096
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1097
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1099
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1101
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1102
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1104
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                        "state" : "NY",
1107
1108
                        "postalCode" : 13031
1109
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1110
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1113
1114
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1115
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1116
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1117
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1119
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1120
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                                 "number" : 395710776
1121
1122
                        }
1123
                ],
1124
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1125
1126
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1127
                         "GaultM@gmail,com"
1128
                ]
1129
       }
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1132
1133
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1135
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1136
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1137
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1138
1139
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1140
1141
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1145
                        },
1146
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1147
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1148
1149
                        },
1150
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1151
                                 "number" : 7806366159
1152
1153
                         }
1154
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1155
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1156
                        "AzaleeR@gamil.com",
1157
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1158
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1159
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1160
1161
                " id" : ObjectId("60bb5b87d5ec118047011de4"),
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1163
                "lastName" : "Burstein",
1164
                "age" : 38,
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1166
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1167
                        "state" : "NY",
1168
1169
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1170
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1172
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1173
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1174
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1175
                        },
1176
                         {
1177
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                                 "number" : 2999933858
1178
1179
                         }
1180
                ],
1181
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1182
                        "Edie@gamil.com",
1183
                        "BEdie@gmail.com",
1184
                        "BursteinE@gmail,com"
1185
                ]
1186
       }
1187
1188
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                "lastName" : "Bannon",
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1191
                "age" : 34,
1192
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1194
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1195
1196
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1197
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1200
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1201
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1202
1203
                         {
1204
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1205
                                 "number" : 8337163141
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1206
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1207
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1208
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1209
1210
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1211
1212
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1214
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1215
                ]
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1217
1218
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                "lastName" : "Gingerich",
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1223
1224
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                         "state" : "NY",
1225
1226
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1227
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1228
1229
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1230
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1232
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1233
                         {
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1235
1236
                         },
1237
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1238
1239
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1240
                         }
1241
                ],
1242
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1243
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1244
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1245
                ]
1246
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1247
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1249
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1250
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1251
1252
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1254
1255
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1256
1257
1258
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1261
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1262
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1263
                         {
1264
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                                  "number": 7965807774
1265
1266
                         }
1267
                ],
1268
                "emailAddress" : [
1269
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1270
                         "WJackie@gmail.com"
1271
                ]
1272
       }
1273
       >
1274
```

```
1275
       >
1276
       >
1277
1278
       > db.Customer.find({age:{$qt:21}}).pretty()
1279
1280
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1281
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1282
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1283
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1285
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1286
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1287
1288
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1289
1290
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1293
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1294
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1295
                         {
1296
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1297
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1298
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1299
                ],
1300
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1301
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1302
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1303
                ]
1304
1305
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1307
                "lastName" : "Garcia",
1308
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1309
1310
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1311
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1312
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1313
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1314
1315
1316
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1319
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1320
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1321
                         {
1322
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                                 "number" : 6754261777
1323
1324
                        }
1325
                ],
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1326
1327
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1328
                        "GMaria@gmail.com"
1329
                ]
1330
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1331
       {
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1333
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1334
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1335
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1336
1337
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1338
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1339
1340
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1341
1342
                "phoneNumber" : [
1343
                        {
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1346
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1347
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1349
1350
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1351
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1352
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1353
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1356
1357
1358
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1359
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1360
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1362
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1365
                         "state" : "MA",
1366
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1367
1368
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1370
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1376
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1377
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1378
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1379
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1380
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1381
                         "LillyM@gmail.com"
1382
                ]
1383
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1384
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1387
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1391
1392
1393
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1394
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1397
1398
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1399
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1401
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1402
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1404
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1405
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1406
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1407
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1408
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1409
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1410
1411
1412
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1415
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1418
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1420
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1421
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1422
1423
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1425
1426
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1427
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1428
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1429
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1431
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1432
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1433
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1434
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1435
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1436
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1439
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1440
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1442
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1443
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1448
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1450
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1454
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1461
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1462
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1468
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1469
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1470
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1472
1473
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1474
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1476
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1477
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1478
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1479
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                         "state" : "NY",
1480
1481
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1482
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1485
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1489
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1490
1491
                         }
                ],
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1493
1494
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1495
                         "CaridadK@gmail.com"
1496
                ]
1497
       }
1498
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1501
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1503
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1504
                         "streetAddress": "5399 W Genesse St",
                         "city" : "Camillus",
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1505
1506
1507
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1508
1509
                "phoneNumber" : [
1510
                         {
1511
                                  "type" : "home",
1512
                                  "number" : 6125582162
1513
                         },
1514
                         {
                                  "type" : "fax",
1515
                                  "number": 935992552
1516
1517
                         },
1518
1519
                                  "type" : "Mobile",
1520
                                  "number" : 395710776
1521
                         }
1522
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1523
1524
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1525
                         "GMichele@gmail.com",
1526
                         "GaultM@gmail,com"
1527
                ]
1528
1529
                " id" : ObjectId("60bb5b87d5ec118047011de2"),
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1531
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1532
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1533
1534
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1535
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1536
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                         "state" : "NY",
1537
1538
                         "postalCode" : 14424
1539
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1540
1541
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1542
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1543
1544
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1545
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1546
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1547
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1548
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1549
                         {
1550
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```

```
1551
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1552
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1553
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1554
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1555
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1556
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1557
                ]
1558
1559
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1561
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1562
1563
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1564
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1565
                         "streetAddress" : "20 Soojian Dr",
                         "city" : "Leicester",
"state" : "MA",
1566
1567
1568
                         "postalCode" : 1524
1569
                },
1570
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1571
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1572
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1573
                                  "number" : 4131667434
1574
                         },
1575
                         {
1576
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1577
1578
                         }
1579
                ],
1580
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1581
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1582
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1583
                1
1584
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1585
                " id" : ObjectId("60bb5b87d5ec118047011de4"),
1586
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1587
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1588
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1589
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1590
1591
                         "streetAddress" : "30 Catskill",
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1592
                         "state" : "NY",
1593
1594
                         "postalCode" : 12414
1595
1596
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1597
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1598
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1601
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1602
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1603
                                  "number": 2999933858
1604
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1605
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1606
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1607
                         "Edie@gamil.com",
1608
                         "BEdie@gmail.com",
1609
                         "BursteinE@gmail,com"
1610
                ]
1611
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1612
1613
                " id" : ObjectId("60bb5b87d5ec118047011de5"),
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1614
                "lastName" : "Strout",
1615
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1617
1618
                         "streetAddress" : "11 Jungle Road",
1619
                         "city" : "Leominster",
```

```
1620
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1621
                         "postalCode" : 1453
1622
1623
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1624
                         {
1625
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1626
                                  "number" : 976463661
1627
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1628
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1629
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1630
                                  "number": 8685337904
1631
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1632
                         {
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1633
                                  "number": 9809039510
1634
1635
                         }
                ],
1636
1637
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1638
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1639
                         "SWill@gmail.com"
1640
                ]
1641
1642
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1643
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1644
                "lastName" : "Bannon",
1645
                "age" : 34,
1646
                "Address" : {
1647
1648
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1649
                         "city" : "Centereach",
                         "state" : "NY",
1650
1651
                         "postalCode" : 11720
1652
                "phoneNumber" : [
1653
1654
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1655
                                  "type" : "home",
                                  "number": 8803053048
1656
1657
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1658
1659
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1660
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1661
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1662
                         {
1663
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1664
                                  "number" : 9735653616
1665
                         }
1666
1667
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1668
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1669
                         "BCesar@gmail.com"
1670
                ]
1671
1672
1673
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1674
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1675
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1676
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1677
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1679
1680
1681
                         "postalCode" : 1905
1682
1683
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1684
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1685
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1686
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1687
1688
                         {
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```
1689
                                  "type" : "fax",
1690
                                  "number" : 2490539545
1691
1692
                ],
1693
                "emailAddress" : [
1694
                         "Hanna@gamil.com",
1695
                         "VHanna@gmail.com",
1696
                         "VolivaHanna@gmail,com"
1697
                ]
1698
1699
       {
1700
                " id" : ObjectId("60bb5b87d5ec118047011de8"),
                "firstName" : "Yuonne",
1701
                "lastName" : "Gingerich",
1702
                "age" : 22,
1703
1704
                "Address" : {
1705
                         "streetAddress" : "3018 East Ave",
1706
                         "city" : "Central Square",
                         "state" : "NY",
1707
1708
                         "postalCode" : 13036
1709
                },
1710
                "phoneNumber" : [
1711
                         {
1712
                                  "type" : "home",
1713
                                  "number" : 2990731778
1714
                         },
1715
                         {
1716
                                  "type" : "fax",
                                  "number" : 4631531140
1717
1718
                         },
1719
                         {
1720
                                  "type" : "Mobile",
                                  "number" : 8829936546
1721
1722
                         }
1723
                ],
1724
                "emailAddress" : [
1725
                         "Yuonne@gamil.com",
1726
                         "GYuonne@gmail.com"
1727
                ]
1728
       }
1729
       {
                " id" : ObjectId("60bb5b87d5ec118047011de9"),
1730
                "firstName" : "Jackie",
1731
1732
                "lastName" : "Wolfenbarger",
                "age" : 22,
1733
1734
                "Address" : {
1735
                         "streetAddress": "100 Thruway Plaza",
                         "city" : "Cheektowaga",
"state" : "NY",
1736
1737
1738
                         "postalCode" : 14225
1739
1740
                "phoneNumber" : [
1741
                         {
1742
                                  "type" : "home",
1743
                                  "number" : 6822716568
1744
                         },
1745
                         {
1746
                                  "type" : "fax",
                                  "number" : 7965807774
1747
1748
                         }
1749
                ],
                "emailAddress" : [
1750
1751
                         "Jackie@gamil.com",
1752
                         "WJackie@gmail.com"
1753
                ]
1754
       }
1755
       >
1756
       >
1757
```

```
1758
       >
1759
       >
1760
1761
       > db.Customer.find({"firstName":{$regex:/^M/}}).pretty()
1762
1763
                " id" : ObjectId("60bb5b87d5ec118047011dd4"),
1764
                "firstName" : "Michael",
                "lastName" : "Smith",
1765
                "age" : 21,
1766
1767
                "Address" : {
1768
                        "streetAddress": "279 Troy Road",
1769
                        "city" : "East Greenbush",
                        "state" : "NY",
1770
1771
                        "postalCode" : 12061
1772
1773
                "phoneNumber" : [
1774
                        {
1775
                                 "type" : "home",
1776
                                 "number" : 9808191199
1777
                        },
1778
                        {
1779
                                 "type" : "fax",
1780
                                 "number" : 7797374941
1781
                        }
1782
                ],
1783
                "emailAddress" : [
1784
                        "MichS@gamil.com",
1785
                        "SMich@gmail.com"
1786
                ]
1787
1788
       {
                " id" : ObjectId("60bb5b87d5ec118047011dd6"),
1789
                "firstName" : "Maria",
1790
1791
                "lastName" : "Garcia",
                "age" : 22,
1792
1793
                "Address" : {
1794
                        "streetAddress": "515 Sawmill Road",
1795
                        "city" : "West Haven",
                        "state" : "CT",
1796
                        "postalCode" : 6516
1797
1798
1799
                "phoneNumber" : [
1800
                        {
1801
                                 "type" : "home",
1802
                                 "number": 8215484894
1803
                        },
1804
                        {
1805
                                 "type" : "fax",
                                 "number" : 6754261777
1806
1807
                        }
1808
                ],
                "emailAddress" : [
1809
1810
                        "MariaG@gamil.com",
1811
                        "GMaria@gmail.com"
1812
                ]
1813
       }
1814
       {
1815
                " id" : ObjectId("60bb5b87d5ec118047011dd8"),
                "firstName" : "Maria",
1816
                "lastName" : "Rodriguez",
1817
1818
                "age" : 20,
                "Address" : {
1819
1820
                        "streetAddress": "100 Thruway Plaza",
1821
                        "city" : "Cheektowaga",
                        "state" : "NY",
1822
1823
                        "postalCode" : 14225
1824
1825
                "phoneNumber" : [
1826
                        {
```

```
1827
                                 "type" : "home",
1828
                                  "number" : 2870577148
1829
                         },
1830
                         {
1831
                                  "type" : "fax",
                                  "number": 1700918899
1832
1833
                         }
1834
                ],
1835
                "emailAddress" : [
1836
                         "MariaR@gamil.com",
1837
                         "RMaria@gmail.com"
1838
                ]
1839
1840
                " id" : ObjectId("60bb5b87d5ec118047011dd9"),
1841
                "firstName" : "Mary",
1842
                "lastName" : "Smith",
1843
                "age" : 22,
1844
1845
                "Address" : {
1846
                         "streetAddress" : "180 River Rd",
1847
                         "city" : "Lisbon",
                         "state" : "CT",
1848
1849
                         "postalCode" : 6351
1850
                "phoneNumber" : [
1851
1852
                         {
1853
                                  "type" : "home",
                                  "number": 9806068527
1854
1855
                         },
1856
                         {
1857
                                 "type" : "fax",
1858
                                  "number" : 3219935317
1859
                         }
1860
                ],
1861
                "emailAddress" : [
                         "Mary@gamil.com",
1862
1863
                         "SMary@gmail.com"
1864
                ]
1865
       }
1866
       {
1867
                " id" : ObjectId("60bb5b87d5ec118047011dda"),
                "firstName" : "Maria",
1868
                "lastName" : "Hernandez",
1869
                "age" : 21,
1870
                "Address" : {
1871
                         "state" : "CT",
1872
                         "Pincode" : 4123
1873
1874
1875
                "phoneNumber" : [
1876
                         {
                                 "type" : "home",
1877
                                 "number" : 7655200366
1878
1879
                         },
1880
                         {
1881
                                  "type" : "fax",
1882
                                  "number" : 481572451
1883
                         }
1884
                "emailAddress" : [
1885
                         "MariaH@gamil.com",
1886
1887
                         "HMaria@gmail.com"
1888
                ]
1889
       }
1890
                " id" : ObjectId("60bb5b87d5ec118047011de1"),
1891
                "firstName" : "Michele",
1892
1893
                "lastName" : "Gault",
                "age" : 36,
1894
1895
                "Address" : {
```

```
"streetAddress" : "5399 W Genesse St",
1896
1897
                              "city" : "Camillus",
                              "state" : "NY",
1898
1899
                              "postalCode" : 13031
1900
1901
                    "phoneNumber" : [
1902
                              {
1903
                                         "type" : "home",
                                         "number" : 6125582162
1904
1905
                              },
                              {
                                         "type" : "fax",
1907
                                         "number": 935992552
1908
1909
                              },
1910
1911
                                         "type" : "Mobile",
1912
                                         "number" : 395710776
1913
                              }
1914
                    ],
1915
                    "emailAddress" : [
1916
                              "MichaelG@gamil.com",
1917
                              "GMichele@gmail.com",
1918
                              "GaultM@gmail,com"
1919
                    ]
1920
1921
1922
1923
1924
1925
1926
        Total number od Doc
1927
        > db.Customer.count()
1928
1929
1930
1931
1932
       Display only name
1933
       > db.Customer.find({},{_id:0,firstName:1,lastName:1}).pretty()
       { "firstName" : "Michael", "lastName" : "Smith" } { "firstName" : "Robert", "lastName" : "Smith" } { "firstName" : "Maria", "lastName" : "Garcia" } { "firstName" : "David", "lastName" : "Smith" }
1934
1935
1936
1937
       { "firstName" : "Maria", "lastName" : "Rodriguez" }
{ "firstName" : "Mary", "lastName" : "Smith" }
1938
1939
        { "firstName" : "Maria", "lastName" : "Hernandez" }
1940
         { "firstName" : "Lilly", "lastName" : "Martinez" }
1941
        { "firstName" : "Kamilah", "lastName" : "Earhart" }
1942
         { "firstName" : "Alise", "lastName" : "Pickrell" }
1943
       { "firstName" : "Leticia", "lastName" : "Wrobel" }
{ "firstName" : "Caridad", "lastName" : "Kendall" }
{ "firstName" : "Michele", "lastName" : "Gault" }
{ "firstName" : "Azalee", "lastName" : "Racey" }
{ "firstName" : "Kathlyn", "lastName" : "Hackenberg" }
1944
1945
1946
1947
1948
        { "firstName" : "Edie", "lastName" : "Burstein" } { "firstName" : "Will", "lastName" : "Strout" }
1949
1950
        { "firstName" : "Cesar", "lastName" : "Bannon" }
1951
        { "firstName" : "Hanna", "lastName" : "Voliva" }
1952
         { "firstName" : "Yuonne", "lastName" : "Gingerich" }
1953
1954
         Type "it" for more
1955
1956
1957
1958
1959
         Sorting Doc in descending
1960
         > db.Customer.find().sort({firstName:-1}).pretty()
1961
1962
                    " id" : ObjectId("60bb5b87d5ec118047011de8"),
1963
                    "firstName" : "Yuonne",
                    "lastName" : "Gingerich",
1964
```

```
1965
                "age" : 22,
1966
                "Address" : {
1967
                         "streetAddress": "3018 East Ave",
                         "city" : "Central Square",
"state" : "NY",
1968
1969
1970
                         "postalCode" : 13036
1971
1972
                "phoneNumber" : [
1973
                         {
1974
                                 "type" : "home",
1975
                                  "number": 2990731778
1976
                         },
1977
                         {
1978
                                 "type" : "fax",
                                  "number" : 4631531140
1979
1980
                         },
1981
                                  "type" : "Mobile",
1982
1983
                                 "number": 8829936546
1984
                         }
1985
                ],
1986
                "emailAddress" : [
1987
                         "Yuonne@gamil.com",
1988
                         "GYuonne@gmail.com"
1989
                ]
1990
1991
1992
                " id" : ObjectId("60bb5b87d5ec118047011de5"),
1993
                "firstName" : "Will",
1994
                "lastName" : "Strout",
1995
                "age" : 36,
1996
                "Address" : {
1997
                         "streetAddress": "11 Jungle Road",
1998
                         "city" : "Leominster",
                         "state" : "MA",
1999
2000
                         "postalCode" : 1453
2001
2002
                "phoneNumber" : [
2003
                         {
2004
                                  "type" : "home",
2005
                                 "number" : 976463661
2006
                         },
2007
                         {
2008
                                 "type" : "fax",
2009
                                  "number" : 8685337904
2010
                         },
2011
                         {
2012
                                 "type" : "Mobile",
                                 "number" : 9809039510
2013
2014
                         }
2015
                ],
                "emailAddress" : [
2016
2017
                         "Will@gamil.com",
2018
                         "SWill@gmail.com"
2019
                ]
2020
       }
2021
2022
                " id" : ObjectId("60bb5d9af5322caf711ed97f"),
2023
                "firstName" : "Vasu",
2024
                "lastName" : "Kalariya"
2025
       }
2026
2027
                " id" : ObjectId("60bb5b87d5ec118047011dd5"),
                "firstName" : "Robert",
2028
                "lastName" : "Smith",
2029
                "age" : 22,
2030
2031
                "Address" : {
2032
                         "streetAddress": "1400 Farmington Ave",
2033
                         "city" : "Bristol",
```

```
2034
                         "state" : "CT",
2035
                         "postalCode" : 6010
2036
2037
                "phoneNumber" : [
2038
                         {
2039
                                  "type" : "home",
2040
                                  "number" : 1761266808
2041
                         },
2042
                         {
2043
                                  "type" : "fax",
2044
                                  "number" : 9841911399
2045
                         }
2046
                "emailAddress" : [
2047
2048
                         "Robert@gamil.com",
2049
                         "SRob@gmail.com"
2050
                ]
2051
       }
2052
       {
                " id" : ObjectId("60bb5b87d5ec118047011de1"),
2053
                "firstName" : "Michele",
2054
2055
                "lastName" : "Gault",
                "age" : 36,
2056
2057
                "Address" : {
2058
                         "streetAddress": "5399 W Genesse St",
                         "city" : "Camillus",
"state" : "NY",
2059
2060
2061
                         "postalCode" : 13031
2062
                "phoneNumber" : [
2063
2064
                         {
2065
                                  "type" : "home",
                                  "number" : 6125582162
2066
2067
                         },
2068
                         {
2069
                                  "type" : "fax",
2070
                                  "number": 935992552
2071
                         },
2072
2073
                                  "type" : "Mobile",
2074
                                  "number" : 395710776
2075
                         }
2076
                ],
2077
                "emailAddress" : [
2078
                         "MichaelG@gamil.com",
2079
                         "GMichele@gmail.com",
2080
                         "GaultM@gmail,com"
2081
                ]
2082
2083
                " id" : ObjectId("60bb5b87d5ec118047011dd4"),
2084
2085
                "firstName" : "Michael",
2086
                "lastName" : "Smith",
                "age" : 21,
2087
2088
                "Address" : {
2089
                         "streetAddress": "279 Troy Road",
2090
                         "city" : "East Greenbush",
                         "state" : "NY",
2091
2092
                         "postalCode" : 12061
2093
                },
2094
                "phoneNumber" : [
2095
                         {
2096
                                  "type" : "home",
2097
                                  "number" : 9808191199
2098
                         },
2099
                         {
2100
                                  "type" : "fax",
                                  "number" : 7797374941
2101
2102
                         }
```

```
2103
                ],
2104
                "emailAddress" : [
2105
                        "MichS@gamil.com",
2106
                        "SMich@gmail.com"
2107
                1
2108
       }
2109
       {
2110
                " id" : ObjectId("60bb5b87d5ec118047011dd9"),
                "firstName" : "Mary",
2111
                "lastName" : "Smith",
2112
                "age" : 22,
2113
2114
                "Address" : {
2115
                        "streetAddress": "180 River Rd",
2116
                        "city" : "Lisbon",
                        "state" : "CT",
2117
2118
                        "postalCode" : 6351
2119
                },
2120
                "phoneNumber" : [
2121
                        {
2122
                                 "type" : "home",
2123
                                 "number": 9806068527
2124
                        },
2125
                        {
2126
                                 "type" : "fax",
2127
                                 "number" : 3219935317
2128
                        }
2129
                ],
2130
                "emailAddress" : [
2131
                        "Mary@gamil.com",
2132
                        "SMary@gmail.com"
2133
                ]
2134
2135
                " id" : ObjectId("60bb5b87d5ec118047011dd6"),
2136
                "firstName" : "Maria",
2137
                "lastName" : "Garcia",
2138
2139
                "age" : 22,
2140
                "Address" : {
2141
                        "streetAddress": "515 Sawmill Road",
                        "city" : "West Haven",
2142
                        "state" : "CT",
2143
2144
                        "postalCode" : 6516
2145
2146
                "phoneNumber" : [
2147
                        {
2148
                                 "type" : "home",
                                 "number": 8215484894
2149
2150
                        },
2151
                        {
2152
                                 "type" : "fax",
2153
                                 "number" : 6754261777
2154
                        }
2155
                ],
2156
                "emailAddress" : [
2157
                        "MariaG@gamil.com",
2158
                        "GMaria@gmail.com"
2159
                ]
2160
       }
2161
       {
                " id" : ObjectId("60bb5b87d5ec118047011dd8"),
2162
                "firstName" : "Maria",
2163
                "lastName" : "Rodriguez",
2164
2165
                "age" : 20,
2166
                "Address" : {
2167
                        "streetAddress": "100 Thruway Plaza",
2168
                        "city" : "Cheektowaga",
                        "state" : "NY",
2169
2170
                        "postalCode" : 14225
2171
                },
```

```
2172
                "phoneNumber" : [
2173
2174
                                  "type" : "home",
                                  "number" : 2870577148
2175
2176
                         },
2177
                         {
                                  "type" : "fax",
2178
                                  "number" : 1700918899
2179
2180
                         }
2181
                ],
2182
                "emailAddress" : [
                         "MariaR@gamil.com",
2183
2184
                         "RMaria@gmail.com"
2185
                ]
2186
2187
                " id" : ObjectId("60bb5b87d5ec118047011dda"),
2188
                "firstName" : "Maria",
2189
2190
                "lastName" : "Hernandez",
2191
                "age" : 21,
2192
                "Address" : {
                         "state" : "CT",
2193
2194
                         "Pincode" : 4123
2195
2196
                "phoneNumber" : [
2197
                         {
2198
                                  "type" : "home",
                                  "number" : 7655200366
2199
2200
                         },
2201
                         {
2202
                                  "type" : "fax",
2203
                                  "number" : 481572451
2204
                         }
2205
                ],
2206
                "emailAddress" : [
2207
                         "MariaH@gamil.com",
2208
                         "HMaria@gmail.com"
2209
                ]
2210
       }
2211
       {
2212
                " id" : ObjectId("60bb5b87d5ec118047011ddb"),
                "firstName" : "Lilly",
2213
                "lastName" : "Martinez",
2214
                "age" : 22,
2215
                "Address" : {
2216
2217
                         "streetAddress": "591 Memorial Dr",
                         "city" : "Chicopee",
"state" : "MA",
2218
2219
                         "postalCode" : 1020
2220
2221
                "phoneNumber" : [
2222
2223
2224
                                  "type" : "home",
2225
                                  "number" : 1723748378
2226
                         },
2227
2228
                                  "type" : "fax",
                                  "number" : 3294228998
2229
2230
                         }
2231
2232
                "emailAddress" : [
                         "Lilly@gamil.com",
2233
2234
                         "MLilly@gmail.com",
2235
                         "LillyM@gmail.com"
2236
                ]
2237
       }
2238
                " id" : ObjectId("60bb5b87d5ec118047011ddf"),
2239
2240
                "firstName" : "Leticia",
```

```
2241
                "lastName" : "Wrobel",
                "age" : 33,
2242
2243
                "Address" : {
2244
                        "streetAddress": "337 Russell St",
                        "city" : "Hadley",
"state" : "MA",
2245
2246
2247
                         "postalCode" : 1035
2248
2249
                "phoneNumber" : [
2250
                         {
2251
                                 "type" : "home",
2252
                                 "number": 1659846658
2253
                        },
2254
                         {
                                 "type" : "fax",
2255
                                 "number": 3502899930
2256
                        },
2257
2258
                         {
2259
                                 "type" : "Mobile",
2260
                                 "number": 8437087134
2261
                         }
2262
                ],
2263
                "emailAddress" : [
2264
                        "Leticia@gamil.com",
2265
                         "WLeticia@gmail.com",
2266
                         "WrobelL@gmail,com"
2267
                ]
2268
2269
2270
                " id" : ObjectId("60bb5b87d5ec118047011de3"),
                "firstName" : "Kathlyn",
2271
2272
                "lastName" : "Hackenberg",
                "age" : 31,
2273
                "Address" : {
2274
                         "streetAddress" : "20 Soojian Dr",
2275
2276
                         "city" : "Leicester",
                        "state" : "MA",
2277
2278
                         "postalCode" : 1524
2279
2280
                "phoneNumber" : [
2281
                         {
2282
                                 "type" : "home",
2283
                                 "number" : 4131667434
                        },
2284
2285
                         {
                                 "type" : "fax",
2286
                                 "number" : 4051166104
2287
2288
                         }
2289
2290
                "emailAddress" : [
2291
                        "Kathlyn@gamil.com",
2292
                        "HKathlyn@gmail.com"
2293
                ]
2294
2295
2296
                " id" : ObjectId("60bb5b87d5ec118047011ddd"),
                "firstName" : "Kamilah",
2297
                "lastName" : "Earhart",
2298
2299
                "age" : 32,
                "Address" : {
2300
2301
                         "streetAddress": "297 Grant Avenue",
2302
                         "city" : "Auburn",
                        "state" : "NY",
2303
2304
                        "postalCode" : 13021
2305
                "phoneNumber" : [
2306
2307
                         {
                                 "type" : "home",
2308
2309
                                 "number" : 7360386487
```

```
2310
                        },
2311
                         {
2312
                                 "type" : "fax",
                                 "number": 8330942524
2313
2314
                ],
2315
2316
                "emailAddress" : [
2317
                        "Kamilah@gamil.com",
2318
                        "EKamlish@gmail.com",
2319
                        "KamilahEar@gmail,com"
2320
                ]
2321
2322
2323
                " id" : ObjectId("60bb5b87d5ec118047011de9"),
                "firstName" : "Jackie",
2324
                "lastName" : "Wolfenbarger",
2325
2326
                "age" : 22,
2327
                "Address" : {
2328
                        "streetAddress": "100 Thruway Plaza",
2329
                        "city": "Cheektowaga",
2330
                        "state" : "NY",
2331
                        "postalCode" : 14225
2332
2333
                "phoneNumber" : [
2334
2335
                                 "type" : "home",
                                 "number" : 6822716568
2336
2337
                        },
2338
                         {
2339
                                 "type" : "fax",
2340
                                 "number": 7965807774
2341
                         }
2342
                ],
2343
                "emailAddress" : [
2344
                        "Jackie@gamil.com",
2345
                        "WJackie@gmail.com"
2346
2347
       }
2348
2349
                " id" : ObjectId("60bb5b87d5ec118047011de7"),
2350
                "firstName" : "Hanna",
                "lastName" : "Voliva",
2351
                "age" : 30,
2352
2353
                "Address" : {
2354
                        "streetAddress" : "780 Lynnway",
2355
                        "city" : "Lynn",
                        "state" : "MA",
2356
2357
                        "postalCode" : 1905
2358
2359
                "phoneNumber" : [
2360
                         {
2361
                                 "type" : "home",
2362
                                 "number" : 4041954879
2363
                        },
2364
                         {
2365
                                 "type" : "fax",
2366
                                 "number" : 2490539545
2367
                        }
2368
                ],
2369
                "emailAddress" : [
2370
                        "Hanna@gamil.com",
2371
                        "VHanna@gmail.com",
2372
                        "VolivaHanna@gmail,com"
2373
                ]
2374
2375
                " id" : ObjectId("60bb5b87d5ec118047011de4"),
2376
                "firstName" : "Edie",
2377
2378
                "lastName" : "Burstein",
```

```
2379
                "age" : 38,
2380
                "Address" : {
2381
                         "streetAddress" : "30 Catskill",
                         "city" : "Catskill",
"state" : "NY",
2382
2383
                         "postalCode" : 12414
2384
2385
2386
                "phoneNumber" : [
2387
                         {
2388
                                  "type" : "home",
2389
                                  "number" : 2601886547
2390
                         },
2391
                         {
2392
                                  "type" : "fax",
                                  "number" : 2999933858
2393
2394
                         }
                ],
2395
2396
                "emailAddress" : [
2397
                         "Edie@gamil.com",
2398
                         "BEdie@gmail.com",
2399
                         "BursteinE@gmail,com"
2400
                1
2401
       }
2402
2403
                " id" : ObjectId("60bb5b87d5ec118047011dd7"),
                "firstName" : "David",
2404
2405
                "lastName" : "Smith",
2406
                "age" : 21,
                "Address" : {
2407
2408
                         "streetAddress" : "30 Memorial Drive",
                         "city" : "Avon",
2409
                         "state" : "MA",
2410
2411
                         "postalCode" : 2322
2412
                "phoneNumber" : [
2413
2414
                         {
2415
                                  "type" : "home",
2416
                                  "number" : 1508518145
2417
                         },
2418
                         {
2419
                                  "type" : "fax",
                                  "number" : 6778131732
2420
2421
                         }
2422
                ],
2423
                "emailAddress" : [
2424
                         "David@gamil.com",
2425
                         "SDavid@gmail.com"
2426
2427
2428
2429
                " id" : ObjectId("60bb5b87d5ec118047011de6"),
2430
                "firstName" : "Cesar",
2431
                "lastName" : "Bannon",
                "age" : 34,
2432
2433
                "Address" : {
2434
                         "streetAddress": "161 Centereach Mall",
2435
                         "city" : "Centereach",
                         "state" : "NY",
2436
2437
                         "postalCode" : 11720
2438
                },
2439
                "phoneNumber" : [
2440
                         {
2441
                                  "type" : "home",
2442
                                  "number": 8803053048
2443
                         },
2444
                         {
2445
                                  "type" : "fax",
2446
                                  "number" : 8337163141
2447
                         },
```

```
2448
                         {
2449
                                 "type" : "Mobile",
2450
                                 "number" : 9735653616
2451
                         }
2452
                "emailAddress" : [
2453
2454
                        "Cesar@gamil.com",
2455
                        "BCesar@gmail.com"
2456
                ]
2457
2458
                " id" : ObjectId("60bb5b87d5ec118047011de0"),
2459
2460
                "firstName" : "Caridad",
                "lastName" : "Kendall",
2461
2462
                "age" : 34,
2463
                "Address" : {
2464
                        "streetAddress" : "6265 Brockport",
2465
                        "city" : "Brockport",
                        "state" : "NY",
2466
2467
                        "postalCode" : 14420
2468
2469
                "phoneNumber" : [
2470
                         {
2471
                                 "type" : "home",
2472
                                 "number" : 8602583403
2473
                        },
2474
                         {
2475
                                 "type" : "fax",
                                 "number": 4326828684
2476
2477
                         }
2478
                ],
2479
                "emailAddress" : [
2480
                        "Caridad@gamil.com",
2481
                        "CaridadK@gmail.com"
2482
                ]
2483
       Type "it" for more
2484
2485
2486
       >
2487
       >
2488
2489
       > db.Customer.find({$and:[{age:{$gt:20}},{lastName:"Smith"}]}).pretty()
2490
2491
                " id" : ObjectId("60bb5b87d5ec118047011dd4"),
2492
                "firstName" : "Michael",
                "lastName" : "Smith",
2493
2494
                "age" : 21,
                "Address" : {
2495
2496
                        "streetAddress": "279 Troy Road",
2497
                        "city" : "East Greenbush",
                        "state" : "NY",
2498
2499
                        "postalCode" : 12061
2500
2501
                "phoneNumber" : [
2502
                         {
2503
                                 "type" : "home",
2504
                                 "number" : 9808191199
2505
                        },
2506
                         {
                                 "type" : "fax",
2507
2508
                                 "number": 7797374941
2509
                         }
2510
2511
                "emailAddress" : [
2512
                        "MichS@gamil.com",
2513
                        "SMich@gmail.com"
2514
                ]
2515
2516
       {
```

```
" id" : ObjectId("60bb5b87d5ec118047011dd5"),
2517
2518
                "firstName" : "Robert",
2519
                "lastName" : "Smith",
2520
                "age" : 22,
2521
                "Address" : {
2522
                        "streetAddress": "1400 Farmington Ave",
                        "city" : "Bristol",
2523
                        "state" : "CT",
2524
                        "postalCode" : 6010
2525
2526
                "phoneNumber" : [
2527
2528
                        {
2529
                                 "type" : "home",
                                 "number": 1761266808
2530
2531
                        },
2532
                        {
                                 "type" : "fax",
2533
                                 "number" : 9841911399
2534
2535
                        }
2536
2537
                "emailAddress" : [
2538
                        "Robert@gamil.com",
2539
                        "SRob@gmail.com"
2540
                1
2541
2542
2543
                " id" : ObjectId("60bb5b87d5ec118047011dd7"),
                "firstName" : "David",
2544
                "lastName" : "Smith",
2545
                "age" : 21,
2546
                "Address" : {
2547
2548
                        "streetAddress": "30 Memorial Drive",
2549
                        "city" : "Avon",
                        "state" : "MA",
2550
2551
                        "postalCode" : 2322
2552
2553
                "phoneNumber" : [
2554
                        {
2555
                                 "type" : "home",
2556
                                 "number" : 1508518145
2557
                        },
2558
                        {
2559
                                 "type" : "fax",
2560
                                 "number" : 6778131732
2561
                        }
2562
                ],
2563
                "emailAddress" : [
                        "David@gamil.com",
2564
2565
                        "SDavid@gmail.com"
2566
                ]
2567
       }
2568
2569
                " id" : ObjectId("60bb5b87d5ec118047011dd9"),
2570
                "firstName" : "Mary",
2571
                "lastName" : "Smith",
2572
                "age" : 22,
                "Address" : {
2573
2574
                        "streetAddress": "180 River Rd",
2575
                        "city" : "Lisbon",
                        "state" : "CT",
2576
2577
                        "postalCode" : 6351
2578
2579
                "phoneNumber" : [
2580
                        {
2581
                                 "type" : "home",
2582
                                 "number": 9806068527
2583
                        },
2584
                        {
2585
                                 "type" : "fax",
```

```
"number": 3219935317
2586
2587
                         }
2588
                ],
2589
                "emailAddress" : [
2590
                         "Mary@gamil.com",
2591
                         "SMary@gmail.com"
2592
                ]
2593
       }
2594
2595
2596
2597
2598
2599
       Query using or operation
2600
       > db.Customer.find(($or:[{age:{$gt:21}},{lastName:"Smith"}]}).pretty()
2601
2602
                " id" : ObjectId("60bb5b87d5ec118047011dd4"),
                "firstName" : "Michael",
2603
2604
                "lastName" : "Smith",
                "age" : 21,
2605
                "Address" : {
2606
2607
                         "streetAddress": "279 Troy Road",
                         "city" : "East Greenbush",
2608
                         "state" : "NY",
2609
2610
                         "postalCode" : 12061
2611
2612
                "phoneNumber" : [
2613
                         {
2614
                                  "type" : "home",
                                 "number" : 9808191199
2615
2616
                         },
2617
                         {
2618
                                 "type" : "fax",
                                  "number": 7797374941
2619
2620
                         }
2621
                ],
                "emailAddress" : [
2622
2623
                         "MichS@gamil.com",
2624
                         "SMich@gmail.com"
2625
                ]
2626
2627
                " id" : ObjectId("60bb5b87d5ec118047011dd5"),
2628
                "firstName" : "Robert",
2629
2630
                "lastName" : "Smith",
                "age" : 22,
2631
2632
                "Address" : {
2633
                         "streetAddress": "1400 Farmington Ave",
2634
                         "city" : "Bristol",
"state" : "CT",
2635
                         "postalCode" : 6010
2636
2637
2638
                "phoneNumber" : [
2639
                         {
2640
                                  "type" : "home",
2641
                                  "number": 1761266808
2642
                         },
2643
                         {
2644
                                  "type" : "fax",
                                  "number" : 9841911399
2645
2646
                         }
2647
                ],
2648
                "emailAddress" : [
2649
                         "Robert@gamil.com",
2650
                         "SRob@gmail.com"
2651
                ]
2652
2653
2654
                " id" : ObjectId("60bb5b87d5ec118047011dd6"),
```

```
2655
                "firstName" : "Maria",
2656
                "lastName" : "Garcia",
2657
                "age" : 22,
2658
                "Address" : {
2659
                        "streetAddress": "515 Sawmill Road",
2660
                        "city" : "West Haven",
                        "state" : "CT",
2661
2662
                        "postalCode" : 6516
2663
                "phoneNumber" : [
2664
2665
                         {
                                 "type" : "home",
2666
                                 "number" : 8215484894
2667
2668
                        },
2669
                         {
2670
                                 "type" : "fax",
2671
                                 "number" : 6754261777
2672
                         }
2673
                ],
2674
                "emailAddress" : [
2675
                        "MariaG@gamil.com",
2676
                        "GMaria@gmail.com"
2677
                1
2678
2679
                " id" : ObjectId("60bb5b87d5ec118047011dd7"),
2680
2681
                "firstName" : "David",
2682
                "lastName" : "Smith",
                "age" : 21,
2683
                "Address" : {
2684
                        "streetAddress" : "30 Memorial Drive",
2685
2686
                        "city" : "Avon",
                        "state" : "MA",
2687
2688
                        "postalCode" : 2322
2689
                "phoneNumber" : [
2690
2691
                         {
2692
                                 "type" : "home",
2693
                                 "number" : 1508518145
2694
                        },
2695
                         {
                                 "type" : "fax",
2696
2697
                                 "number" : 6778131732
2698
                        }
2699
2700
                "emailAddress" : [
2701
                        "David@gamil.com",
2702
                        "SDavid@gmail.com"
2703
                ]
2704
       }
2705
2706
                " id" : ObjectId("60bb5b87d5ec118047011dd9"),
2707
                "firstName" : "Mary",
                "lastName" : "Smith",
2708
2709
                "age" : 22,
2710
                "Address" : {
2711
                        "streetAddress" : "180 River Rd",
2712
                        "city" : "Lisbon",
                        "state" : "CT",
2713
2714
                        "postalCode" : 6351
2715
                "phoneNumber" : [
2716
2717
2718
                                 "type" : "home",
2719
                                 "number": 9806068527
                        },
2720
2721
                         {
2722
                                 "type" : "fax",
2723
                                 "number" : 3219935317
```

```
2724
                        }
2725
                ],
2726
                "emailAddress" : [
2727
                        "Mary@gamil.com",
2728
                        "SMary@gmail.com"
2729
                ]
2730
       }
2731
       {
2732
                " id" : ObjectId("60bb5b87d5ec118047011ddb"),
                "firstName" : "Lilly",
2733
2734
                "lastName" : "Martinez",
2735
                "age" : 22,
                "Address" : {
2736
                        "streetAddress" : "591 Memorial Dr",
2737
2738
                        "city" : "Chicopee",
                        "state" : "MA",
2739
2740
                        "postalCode" : 1020
2741
2742
                "phoneNumber" : [
2743
                         {
2744
                                 "type" : "home",
2745
                                 "number" : 1723748378
2746
                        },
2747
                         {
2748
                                 "type" : "fax",
                                 "number": 3294228998
2749
2750
                         }
                ],
2751
2752
                "emailAddress" : [
2753
                        "Lilly@gamil.com",
2754
                        "MLilly@gmail.com",
2755
                        "LillyM@gmail.com"
2756
                ]
2757
       }
2758
2759
                " id" : ObjectId("60bb5b87d5ec118047011ddd"),
2760
                "firstName" : "Kamilah",
2761
                "lastName" : "Earhart",
                "age" : 32,
2762
                "Address" : {
2763
2764
                        "streetAddress": "297 Grant Avenue",
2765
                        "city" : "Auburn",
                        "state" : "NY",
2766
2767
                        "postalCode" : 13021
2768
2769
                "phoneNumber" : [
2770
                         {
2771
                                 "type" : "home",
                                 "number": 7360386487
2772
2773
                        },
2774
                         {
2775
                                 "type" : "fax",
2776
                                 "number": 8330942524
2777
                         }
2778
                ],
2779
                "emailAddress" : [
2780
                        "Kamilah@gamil.com",
2781
                        "EKamlish@gmail.com",
2782
                         "KamilahEar@gmail,com"
2783
                ]
2784
       }
2785
       {
                " id" : ObjectId("60bb5b87d5ec118047011dde"),
2786
                "firstName" : "Alise",
2787
                "lastName" : "Pickrell",
2788
                "age" : 29,
2789
2790
                "Address" : {
2791
                        "streetAddress": "4133 Veterans Memorial",
2792
                        "city" : "Batavia",
```

```
2793
                        "state" : "NY",
2794
                         "postalCode" : 14020
2795
2796
                "phoneNumber" : [
2797
                         {
2798
                                 "type" : "home",
2799
                                 "number": 8564397599
2800
                        },
2801
                         {
2802
                                 "type" : "fax",
2803
                                 "number" : 5426189495
2804
                        },
2805
                         {
2806
                                 "type" : "Mobile",
                                 "number" : 3314579129
2807
2808
                         }
                ],
2809
2810
                "emailAddress" : [
2811
                        "AliseP@gamil.com",
2812
                        "PAlise@gmail.com"
2813
                ]
2814
2815
                " id" : ObjectId("60bb5b87d5ec118047011ddf"),
2816
                "firstName" : "Leticia",
2817
                "lastName" : "Wrobel",
2818
2819
                "age" : 33,
                "Address" : {
2820
2821
                        "streetAddress": "337 Russell St",
2822
                        "city" : "Hadley",
                        "state" : "MA",
2823
2824
                        "postalCode" : 1035
2825
                "phoneNumber" : [
2826
2827
                         {
2828
                                 "type" : "home",
                                 "number" : 1659846658
2829
2830
                        },
2831
2832
                                 "type" : "fax",
                                 "number": 3502899930
2833
2834
                        },
2835
                         {
2836
                                 "type" : "Mobile",
2837
                                 "number" : 8437087134
2838
                        }
2839
                "emailAddress" : [
2840
2841
                        "Leticia@gamil.com",
2842
                        "WLeticia@gmail.com",
2843
                        "WrobelL@gmail,com"
2844
                ]
2845
2846
2847
                " id" : ObjectId("60bb5b87d5ec118047011de0"),
2848
                "firstName" : "Caridad",
2849
                "lastName" : "Kendall",
2850
                "age" : 34,
2851
                "Address" : {
2852
                        "streetAddress": "6265 Brockport",
2853
                         "city" : "Brockport",
                        "state" : "NY",
2854
2855
                        "postalCode" : 14420
2856
2857
                "phoneNumber" : [
2858
                         {
2859
                                 "type" : "home",
                                 "number" : 8602583403
2860
2861
                        },
```

```
2862
                         {
2863
                                  "type" : "fax",
                                  "number" : 4326828684
2864
2865
                         }
2866
                "emailAddress" : [
2867
                         "Caridad@gamil.com",
2868
2869
                         "CaridadK@gmail.com"
2870
                ]
2871
2872
                " id" : ObjectId("60bb5b87d5ec118047011de1"),
2873
                "firstName" : "Michele",
2874
                "lastName" : "Gault",
2875
                "age" : 36,
2876
2877
                "Address" : {
2878
                         "streetAddress" : "5399 W Genesse St",
                         "city" : "Camillus",
2879
                         "state" : "NY",
2880
2881
                         "postalCode" : 13031
2882
2883
                "phoneNumber" : [
2884
                         {
2885
                                  "type" : "home",
2886
                                  "number" : 6125582162
2887
                         },
2888
                         {
2889
                                  "type" : "fax",
2890
                                  "number" : 935992552
2891
                         },
2892
                         {
2893
                                  "type" : "Mobile",
                                  "number" : 395710776
2894
2895
                         }
2896
                ],
                "emailAddress" : [
2897
2898
                         "MichaelG@gamil.com",
2899
                         "GMichele@gmail.com",
2900
                         "GaultM@gmail,com"
2901
                ]
2902
2903
                " id" : ObjectId("60bb5b87d5ec118047011de2"),
2904
                "firstName" : "Azalee",
2905
                "lastName" : "Racey",
2906
                "age" : 31,
2907
2908
                "Address" : {
2909
                         "streetAddress": "3191 County rd 10",
                         "city" : "Canandaigua",
"state" : "NY",
2910
2911
                         "postalCode" : 14424
2912
2913
2914
                "phoneNumber" : [
2915
                         {
2916
                                  "type" : "home",
2917
                                  "number": 8268801323
2918
                         },
2919
                         {
2920
                                  "type" : "fax",
2921
                                  "number": 9568588641
2922
                         },
2923
                         {
2924
                                  "type" : "Mobile",
                                  "number" : 7806366159
2925
2926
                         }
2927
                ],
2928
                "emailAddress" : [
2929
                         "AzaleeR@gamil.com",
2930
                         "RAzalee@gmail.com"
```

```
2931
                1
2932
       }
2933
2934
                " id" : ObjectId("60bb5b87d5ec118047011de3"),
2935
                "firstName" : "Kathlyn",
2936
                "lastName" : "Hackenberg",
2937
                "age" : 31,
                "Address" : {
2938
2939
                        "streetAddress": "20 Soojian Dr",
2940
                        "city" : "Leicester",
                        "state" : "MA",
2941
2942
                        "postalCode" : 1524
2943
2944
                "phoneNumber" : [
2945
                         {
2946
                                 "type": "home",
2947
                                 "number" : 4131667434
2948
                        },
2949
                         {
2950
                                 "type" : "fax",
2951
                                 "number" : 4051166104
2952
                         }
2953
                ],
2954
                "emailAddress" : [
2955
                        "Kathlyn@gamil.com",
2956
                        "HKathlyn@gmail.com"
2957
                ]
2958
2959
2960
                " id" : ObjectId("60bb5b87d5ec118047011de4"),
2961
                "firstName" : "Edie",
2962
                "lastName" : "Burstein",
                "age" : 38,
2963
                "Address" : {
2964
2965
                        "streetAddress" : "30 Catskill",
                         "city" : "Catskill",
2966
                        "state" : "NY",
2967
2968
                        "postalCode" : 12414
2969
                "phoneNumber" : [
2970
2971
                         {
2972
                                 "type" : "home",
2973
                                 "number" : 2601886547
2974
                        },
2975
                         {
2976
                                 "type" : "fax",
                                 "number": 2999933858
2977
2978
                         }
2979
                "emailAddress" : [
2980
                        "Edie@gamil.com",
2981
2982
                        "BEdie@gmail.com",
2983
                        "BursteinE@gmail,com"
2984
                ]
2985
       }
2986
2987
                " id" : ObjectId("60bb5b87d5ec118047011de5"),
                "firstName" : "Will",
2988
                "lastName" : "Strout",
2989
                "age" : 36,
2990
2991
                "Address" : {
2992
                        "streetAddress" : "11 Jungle Road",
2993
                        "city" : "Leominster",
                        "state" : "MA",
2994
2995
                        "postalCode" : 1453
2996
2997
                "phoneNumber" : [
2998
                         {
2999
                                 "type" : "home",
```

```
3000
                                  "number": 976463661
3001
                         },
3002
                         {
3003
                                  "type" : "fax",
                                  "number": 8685337904
3004
                        },
3005
3006
                         {
3007
                                 "type" : "Mobile",
                                 "number": 9809039510
3008
3009
                         }
                ],
3010
3011
                "emailAddress" : [
3012
                         "Will@gamil.com",
3013
                         "SWill@gmail.com"
3014
                ]
3015
       }
3016
                " id" : ObjectId("60bb5b87d5ec118047011de6"),
3017
3018
                "firstName" : "Cesar",
3019
                "lastName" : "Bannon",
3020
                "age" : 34,
3021
                "Address" : {
3022
                         "streetAddress": "161 Centereach Mall",
                        "city" : "Centereach",
"state" : "NY",
3023
3024
3025
                         "postalCode" : 11720
3026
3027
                "phoneNumber" : [
3028
                         {
3029
                                  "type" : "home",
3030
                                  "number": 8803053048
3031
                         },
3032
                         {
                                  "type" : "fax",
3033
                                  "number": 8337163141
3034
3035
                         },
3036
                         {
3037
                                 "type" : "Mobile",
3038
                                  "number" : 9735653616
3039
                         }
3040
                "emailAddress" : [
3041
3042
                         "Cesar@gamil.com",
3043
                         "BCesar@gmail.com"
3044
                1
3045
3046
3047
                " id" : ObjectId("60bb5b87d5ec118047011de7"),
                "firstName" : "Hanna",
3048
3049
                "lastName" : "Voliva",
3050
                "age" : 30,
                "Address" : {
3051
3052
                         "streetAddress": "780 Lynnway",
3053
                         "city" : "Lynn",
3054
                         "state" : "MA",
3055
                         "postalCode" : 1905
3056
                "phoneNumber" : [
3057
3058
                         {
                                  "type" : "home",
3059
3060
                                  "number" : 4041954879
3061
                         },
3062
                         {
                                 "type" : "fax",
3063
3064
                                 "number" : 2490539545
3065
                         }
3066
                ],
3067
                "emailAddress" : [
3068
                         "Hanna@gamil.com",
```

```
3069
                         "VHanna@gmail.com",
3070
                        "VolivaHanna@gmail,com"
3071
                ]
3072
3073
3074
                " id" : ObjectId("60bb5b87d5ec118047011de8"),
                "firstName" : "Yuonne",
3075
3076
                "lastName" : "Gingerich",
                "age" : 22,
3077
                "Address" : {
3078
3079
                        "streetAddress": "3018 East Ave",
                        "city" : "Central Square",
3080
                        "state" : "NY",
3081
                        "postalCode" : 13036
3082
3083
3084
                "phoneNumber" : [
3085
                        {
3086
                                 "type" : "home",
3087
                                 "number" : 2990731778
3088
                        },
3089
                         {
3090
                                 "type" : "fax",
3091
                                 "number" : 4631531140
3092
                        },
3093
                         {
3094
                                 "type" : "Mobile",
                                 "number" : 8829936546
3095
3096
                         }
3097
                ],
3098
                "emailAddress" : [
3099
                        "Yuonne@gamil.com",
3100
                        "GYuonne@gmail.com"
3101
                1
3102
3103
                " id" : ObjectId("60bb5b87d5ec118047011de9"),
3104
                "firstName" : "Jackie",
3105
                "lastName" : "Wolfenbarger",
3106
                "age" : 22,
3107
                "Address" : {
3108
3109
                        "streetAddress": "100 Thruway Plaza",
3110
                        "city": "Cheektowaga",
                        "state" : "NY",
3111
3112
                        "postalCode" : 14225
3113
3114
                "phoneNumber" : [
3115
                         {
3116
                                 "type" : "home",
3117
                                 "number" : 6822716568
3118
                        },
3119
                         {
3120
                                 "type" : "fax",
3121
                                 "number": 7965807774
3122
                        }
3123
                ],
3124
                "emailAddress" : [
3125
                        "Jackie@gamil.com",
3126
                        "WJackie@gmail.com"
3127
                ]
3128
3129
3130
3131
3132
3133
3134
       Display only two Documents
3135
       > db.Customer.find().pretty().limit(2)
3136
3137
                " id" : ObjectId("60bb5b87d5ec118047011dd4"),
```

```
3138
                "firstName" : "Michael",
                "lastName" : "Smith",
3139
                "age" : 21,
3140
3141
                "Address" : {
3142
                        "streetAddress": "279 Troy Road",
                        "city" : "East Greenbush",
"state" : "NY",
3143
3144
                        "postalCode" : 12061
3145
3146
                "phoneNumber" : [
3147
3148
                         {
3149
                                 "type" : "home",
                                 "number": 9808191199
3150
3151
                        },
3152
                         {
                                 "type" : "fax",
3153
                                 "number" : 7797374941
3154
3155
                         }
3156
                ],
3157
                "emailAddress" : [
3158
                        "MichS@gamil.com",
3159
                        "SMich@gmail.com"
3160
                1
3161
       }
3162
       {
3163
                " id" : ObjectId("60bb5b87d5ec118047011dd5"),
                "firstName" : "Robert",
3164
                "lastName" : "Smith",
3165
3166
                "age" : 22,
                "Address" : {
3167
3168
                        "streetAddress": "1400 Farmington Ave",
3169
                        "city" : "Bristol",
                        "state" : "CT",
3170
3171
                         "postalCode" : 6010
3172
3173
                "phoneNumber" : [
3174
                         {
3175
                                 "type" : "home",
3176
                                 "number" : 1761266808
3177
                        },
3178
                         {
3179
                                 "type" : "fax",
3180
                                 "number" : 9841911399
3181
                         }
3182
3183
                "emailAddress" : [
3184
                        "Robert@gamil.com",
3185
                         "SRob@gmail.com"
3186
                ]
3187
       }
3188
3189
3190
3191
3192
3193
      Drop Document
3194
      > db.Customer.drop()
3195
      true
3196
       >
3197
       >
3198
```