מטלה 3- מסדי נתונים.

# mongoDB

1.

db.Students.insert({

\_id: ObjectId("50a8240b927d7d8b5891743c"),

tz: "1143",

FirstName: "Ron",

LastName: "Jonen",

Department: "Computer Science" ,

Year: "2" ,

Courses: [ { name: "Linear Algebra 1", grade: 95}, {name: "OS", grade: 80}] })

2.

db.Students.mapReduce(

function () {emit(this.student, this.grade);},

function(keyd\_id, valuesGrades){

return (Array.average(valuesGrades)>90);}

out : "example1\_results"

}

)

# Neo4j

MATCH (n:Worker)

WITH n.address ="TA" AND n.salary>=10000 AND count(dep WHERE (n)-[:work\_in]->(dep))>=2 AND ((n)-[\*..3]-(b) WHERE b.salary>=10000 and b-[r1:work\_in]->(depOfB{name:‘QA'}))

RETURN DISTINCT n.name order by n.name

**static** **void** qu05(Collection<Character> myCollect) {

myCollect.stream().filter(a->*inRange*(a)).

map(a->*atBash*(a)).forEach(a->System.***out***.print(a + " "));

}

**static** **boolean** inRange(**char** ch) {

**if** (ch> 'G' && ch <'O')

**return** **true**;

**return** (ch> 'g' && ch <'o');

}

**static** **char** atBash(**char** ch) {

**if** (ch<='Z')

**return** (**char**)('Z'- ch + 'A');

**return** (**char**)('z'- ch + 'a');

}

|  |  |  |
| --- | --- | --- |
| 111 | name | ישראל ישראלי |
| 111 | age | 15 |
| 111 | father\_ID | 444 |
| 222 | name | פלוני אלמוני |
| 222 | age | 2 |
| 222 | father\_ID | 333 |
| 333 | name | ג'ון סמית |
| 333 | age | 30 |
| 333 | father\_ID | 444 |
| 444 | name | ראובן אריאל |
| 444 | age | 81 |
| 444 | father\_ID | 555 |

SELECT ?person WHERE {

?person father\_ID ?parent

?parent father\_ID ?reuven\_ID

?reuven\_ID name "ראובן אריאל"

}

