MongoDB

DB.students.FIND({$OR:[{"Department" : "Computer Science"}, {"Year":{$lt:2}},   
{"YearOfBierth":{$lt:1999}}]}, {"\_id":0,"FirstName":1,"LastName":1});



var map2 = function(){

var k = "Department:"+this.Department+", Year: "+this.Year ;

var sum =0;

for(var i = 0; i < this.Courses.length;i++){

sum += this.Courses[i].grade;

}

var v = sum / this.Courses.length;

if(v >=90){

emit(k, this.FirstName);

}

};

var red2 = function(k,val){

return { $objectToArray: val };

};

db.students.mapReduce(map2,red2,{out: "check2",});



Neo4J

MATCH (n) WHERE ((n:worker OR n:manager) AND (n.adress = "TEL-AVIV")   
AND (n.salary >= 19999)) <-[1..3]- (m) WHERE (m.salary >= 19999) AND  
(m)-[:work\_In]->(:department{className:"QA"}) RETURN n.name;

ElasticSearch

PUT Books/book  
{  
 "Title":"A GAME OF THRONES",  
 "Author":"George R. R. Martin",  
 "Genre":"Epic Fantasy",  
 "Published":"Bantam Spectra (US)",  
 "Published\_Date":1996,  
 "Plot":"ctx.\_source.description = \\\"Short summary about the book…\\\"\"  
}



curl -XGET "http://localhost:9200/Books/book/\_search"  
{  
 "query": {  
 "bool":" {  
 "filter":  
 [  
 { "range": { "Published\_Date": { "gte": 2999 } } },  
 { "match": { "Genre": "Fiction Science" } },  
 { "match": { "Plot": ["Fiction Science", "reality"] } }   
 ]  
 }  
 }  
}

TF-IDF

Q : איזה יום היום

1.

2.

3.

4.

1. היום שימשי מאוד בחוץ -----------------------------------------------
2. היום יום חמישי -----------------------------
3. איזה יום נעים היום --------
4. היום יום הולדת ליונתן ----------------------

X-PATH

//country [sum( /city/@num) >= 1000000]/@name

JAVA-SREAM

public static int avg(LinkedList<Cours> l) {  
 int count = 0, sum = 0, ans;  
 for (Cours cours : l) {  
 if(cours.grade > 60){  
 sum += cours.grade;  
 count++;  
 }  
 }  
 ans = sum / count;  
 return ans;  
}

Arrays.stream(studentsDB).filter(x -> x.Year >= 2).map(x -> x.FirstName + ", "+avg(x.Courses)).forEach(System.out::println);

SPARQL-RDF

SELECT ?N WHERE {  
 ?ID NAME "ראובן אריאל"  
 ?F FATHER\_ID ?ID  
 ?GD FATHER\_ID ?F  
 ?N NAME ?GD  
}

|  |  |  |
| --- | --- | --- |
| נושא (Subject) | נשוא (Predicate) | מושא (Object) |
| 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 | 330 |
| 333 | FATHER\_ID | 444 |
| 444 | NAME | ראובן אריאל |
| 444 | AGE | 81 |
| 444 | FATHER\_ID | 555 |