

# 18655 Homework 6

## Result Screen Shot with Bonus

1. Basic Search with keyword “algorithm”, skip 0 and then print first 15 result

```
<terminated> TestSearch [Java Application] /Library/Java/JavaVirtualMachines/jdk1.7.0_79.jdk/Contents/Home/bin/java (Oct 10, 2015, 1:13:21 AM)
Basic Search 1 Search In large Range
Search "algorithm" TOP 15 Records
No.1 idKey : journals/acta/SackS85; Title : An Algorithm for Merging Heaps.; Year : 1985; author 1 : Jörg-Rüdiger Sack
No.2 idKey : journals/acta/Gries73; Title : Describing an Algorithm by Hopcroft; Year : 1973; author 1 : David Gries;
No.3 idKey : journals/acta/Ranzato14; Title : An efficient simulation algorithm on Kripke structures.; Year : 2014; a
No.4 idKey : journals/acta/CoffmanDK12; Title : An efficient algorithm for finding ideal schedules.; Year : 2012; aut
No.5 idKey : journals/acta/Hesselink06a; Title : Refinement verification of the lazy caching algorithm.; Year : 2006;
No.6 idKey : journals/acta/Gries79; Title : The Schorr-Waite Graph Marking Algorithm.; Year : 1979; author 1 : David
No.7 idKey : journals/acta/KouMB81; Title : A Fast Algorithm for Steiner Trees.; Year : 1981; author 1 : Lawrence T.
No.8 idKey : journals/acta/Galil80a; Title : Algorithm for the Maximal Flow Problem.; Year : 1980; author 1 : Zvi Gal
No.9 idKey : journals/acta/CorradiniBV09; Title : Liveness of a mutex algorithm in a fair process algebra.; Year : 20
No.10 idKey : journals/acta/KumarR87; Title : A Linear Space Algorithm for the LCS Problem.; Year : 1987; author 1 :
No.11 idKey : journals/acta/Hesselink13a; Title : A distributed resource allocation algorithm for many processes.; Yea
No.12 idKey : journals/acta/Topor79; Title : The Correctness of the Schorr-Waite List Marking Algorithm.; Year : 1979
No.13 idKey : journals/acta/HinrichsNS92; Title : An All-Round Sweep Algorithm for 2-Dimensional Nearest-Neighbor Pro
No.14 idKey : journals/acta/GareyG74; Title : Performance Bounds on the Splitting Algorithm for Binary Testing.; Year
No.15 idKey : journals/acta/FischerM92; Title : A Simple, Fast, and Effective LL(1) Error Repair Algorithm.; Year : 1
```

2. Basic Search with keyword “algorithm”, skip 5 and then print first 15 results

```
Basic Search 2 Search In small Range
Skip top 5 and Print 15 results
No.1 idKey : journals/acta/Gries79; Title : The Schorr-Waite Graph Marking Algorithm.; Year : 1979; author 1 : David
No.2 idKey : journals/acta/KouMB81; Title : A Fast Algorithm for Steiner Trees.; Year : 1981; author 1 : Lawrence T.
No.3 idKey : journals/acta/Galil80a; Title : Algorithm for the Maximal Flow Problem.; Year : 1980; author 1 : Zvi Gal
No.4 idKey : journals/acta/CorradiniBV09; Title : Liveness of a mutex algorithm in a fair process algebra.; Year : 20
No.5 idKey : journals/acta/KumarR87; Title : A Linear Space Algorithm for the LCS Problem.; Year : 1987; author 1 : S
No.6 idKey : journals/acta/Hesselink13a; Title : A distributed resource allocation algorithm for many processes.; Yea
No.7 idKey : journals/acta/Topor79; Title : The Correctness of the Schorr-Waite List Marking Algorithm.; Year : 1979;
No.8 idKey : journals/acta/HinrichsNS92; Title : An All-Round Sweep Algorithm for 2-Dimensional Nearest-Neighbor Prob
No.9 idKey : journals/acta/GareyG74; Title : Performance Bounds on the Splitting Algorithm for Binary Testing.; Year
No.10 idKey : journals/acta/FischerM92; Title : A Simple, Fast, and Effective LL(1) Error Repair Algorithm.; Year : 1
No.11 idKey : journals/acta/CohenR76; Title : On the Implementation of Strassen's Fast Multiplication Algorithm.; Yea
No.12 idKey : journals/acta/HorwitzDT87; Title : An Efficient General Iterative Algorithm for Dataflow Analysis.; Yea
No.13 idKey : journals/acta/Dail07; Title : An exact subexponential-time lattice algorithm for Asian options.; Year :
No.14 idKey : journals/acta/Szpankowski87; Title : An Analysis of a Contention Resolution Algorithm: Another Approach
No.15 idKey : journals/acta/NakatsuKY82; Title : A Longest Common Subsequence Algorithm Suitable for Similar Text Str
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3. Spatial Search with keyword “algorithm”, skip 5 and then print first 15 results

search range is 1915 to 2015

```
Spatial Search 1 Search In Large Year Range
From Year 1915 to Year 2015
No.1 idKey : journals/acta/Gries79; Title : The Schorr-Waite Graph Marking Algorithm.; Year : 1979; author 1 : David C
No.2 idKey : journals/acta/KouMB81; Title : A Fast Algorithm for Steiner Trees.; Year : 1981; author 1 : Lawrence T. M
No.3 idKey : journals/acta/Galil80a; Title : Algorithm for the Maximal Flow Problem.; Year : 1980; author 1 : Zvi Galil
No.4 idKey : journals/acta/CorradiniBV09; Title : Liveness of a mutex algorithm in a fair process algebra.; Year : 200
No.5 idKey : journals/acta/KumarR87; Title : A Linear Space Algorithm for the LCS Problem.; Year : 1987; author 1 : S.
No.6 idKey : journals/acta/Hesselink13a; Title : A distributed resource allocation algorithm for many processes.; Year
No.7 idKey : journals/acta/Topor79; Title : The Correctness of the Schorr-Waite List Marking Algorithm.; Year : 1979;
No.8 idKey : journals/acta/HinrichsNS92; Title : An All-Round Sweep Algorithm for 2-Dimensional Nearest-Neighbor Probl
No.9 idKey : journals/acta/GareyG74; Title : Performance Bounds on the Splitting Algorithm for Binary Testing.; Year :
No.10 idKey : journals/acta/FischerM92; Title : A Simple, Fast, and Effective LL(1) Error Repair Algorithm.; Year : 19
No.11 idKey : journals/acta/CohenR76; Title : On the Implementation of Strassen's Fast Multiplication Algorithm.; Year
No.12 idKey : journals/acta/HorwitzDT87; Title : An Efficient General Iterative Algorithm for Dataflow Analysis.; Year
No.13 idKey : journals/acta/Dail07; Title : An exact subexponential-time lattice algorithm for Asian options.; Year :
No.14 idKey : journals/acta/Szpankowski87; Title : An Analysis of a Contention Resolution Algorithm: Another Approach.
No.15 idKey : journals/acta/NakatsuKY82; Title : A Longest Common Subsequence Algorithm Suitable for Similar Text Stri
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```

4. Spatial Search with keyword “algorithm”, skip 5 and then print first 15 results

search range is 2000 to 2015

```
Spatial Search 2 Search In Small Year Range
From Year 2000 to Year 2015
No.1 idKey : journals/acta/Dail07; Title : An exact subexponential-time lattice algorithm for Asian options.; Year :
No.2 idKey : journals/acta/MitranaT11; Title : New bounds for the query complexity of an algorithm that learns DFAs w
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```

## 2. Bonus

The web service is published in RPC-Style and the url is “http://localhost:9999/ws/queryPublication”

### 1. Basic Search with keyword “algorithm” , skip 0 and then print first 15 result

```
Search Service On
http://localhost:9999/ws/queryPublication
Basic Search 1 Search In large Range
Search "algorithm" TOP 15 Records
No.1 idKey : journals/acta/SackS85; Title : An Algorithm for Merging Heaps.; Year : 1985; author 1 : Jörg-Rüdiger Sack
No.2 idKey : journals/acta/Gries73; Title : Describing an Algorithm by Hopcroft; Year : 1973; author 1 : David Gries;
No.3 idKey : journals/acta/Ranzato14; Title : An efficient simulation algorithm on Kripke structures.; Year : 2014; au
No.4 idKey : journals/acta/CoffmanDK12; Title : An efficient algorithm for finding ideal schedules.; Year : 2012; aut
No.5 idKey : journals/acta/Hesselink06a; Title : Refinement verification of the lazy caching algorithm.; Year : 2006;
No.6 idKey : journals/acta/Gries79; Title : The Schorr-Waite Graph Marking Algorithm.; Year : 1979; author 1 : David G
No.7 idKey : journals/acta/KouMB81; Title : A Fast Algorithm for Steiner Trees.; Year : 1981; author 1 : Lawrence T. K
No.8 idKey : journals/acta/Galil80a; Title : Algorithm for the Maximal Flow Problem.; Year : 1980; author 1 : Zvi Gal
No.9 idKey : journals/acta/CorradiniBV09; Title : Liveness of a mutex algorithm in a fair process algebra.; Year : 200
No.10 idKey : journals/acta/KumarR87; Title : A Linear Space Algorithm for the LCS Problem.; Year : 1987; author 1 : S
No.11 idKey : journals/acta/Hesselink13a; Title : A distributed resource allocation algorithm for many processes.; Yea
No.12 idKey : journals/acta/Topor79; Title : The Correctness of the Schorr-Waite List Marking Algorithm.; Year : 1979;
No.13 idKey : journals/acta/HinrichsNS92; Title : An All-Round Sweep Algorithm for 2-Dimensional Nearest-Neighbor Prob
No.14 idKey : journals/acta/GareyG74; Title : Performance Bounds on the Splitting Algorithm for Binary Testing.; Year
No.15 idKey : journals/acta/FischerM92; Title : A Simple, Fast, and Effective LL(1) Error Repair Algorithm.; Year : 19
```

### 2. Basic Search with keyword “algorithm”, skip 5 and then print first 15 results

```
Basic Search 2 Search In small Range
Skip top 5 and Print 15 results
No.1 idKey : journals/acta/Gries79; Title : The Schorr-Waite Graph Marking Algorithm.; Year : 1979; author 1 : David G
No.2 idKey : journals/acta/KouMB81; Title : A Fast Algorithm for Steiner Trees.; Year : 1981; author 1 : Lawrence T. K
No.3 idKey : journals/acta/Galil80a; Title : Algorithm for the Maximal Flow Problem.; Year : 1980; author 1 : Zvi Gal
No.4 idKey : journals/acta/CorradiniBV09; Title : Liveness of a mutex algorithm in a fair process algebra.; Year : 200
No.5 idKey : journals/acta/KumarR87; Title : A Linear Space Algorithm for the LCS Problem.; Year : 1987; author 1 : S
No.6 idKey : journals/acta/Hesselink13a; Title : A distributed resource allocation algorithm for many processes.; Year
No.7 idKey : journals/acta/Topor79; Title : The Correctness of the Schorr-Waite List Marking Algorithm.; Year : 1979;
No.8 idKey : journals/acta/HinrichsNS92; Title : An All-Round Sweep Algorithm for 2-Dimensional Nearest-Neighbor Prob
No.9 idKey : journals/acta/GareyG74; Title : Performance Bounds on the Splitting Algorithm for Binary Testing.; Year
No.10 idKey : journals/acta/FischerM92; Title : A Simple, Fast, and Effective LL(1) Error Repair Algorithm.; Year : 19
No.11 idKey : journals/acta/CohenR76; Title : On the Implementation of Strassen's Fast Multiplication Algorithm.; Year
No.12 idKey : journals/acta/HorwitzDT87; Title : An Efficient General Iterative Algorithm for Dataflow Analysis.; Year
No.13 idKey : journals/acta/Dail07; Title : An exact subexponential-time lattice algorithm for Asian options.; Year :
No.14 idKey : journals/acta/Szpankowski87; Title : An Analysis of a Contention Resolution Algorithm: Another Approach
No.15 idKey : journals/acta/NakatsuKY82; Title : A Longest Common Subsequence Algorithm Suitable for Similar Text Str
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3. Spatial Search with keyword “algorithm”, skip 5 and then print first 15 results

search range is 1915 to 2015

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From Year 1915 to Year 2015
No.1 idKey : journals/acta/Gries79; Title : The Schorr-Waite Graph Marking Algorithm.; Year : 1979; author 1 : David Gries;
No.2 idKey : journals/acta/KouMB81; Title : A Fast Algorithm for Steiner Trees.; Year : 1981; author 1 : Lawrence T. Koullouros;
No.3 idKey : journals/acta/Galil80a; Title : Algorithm for the Maximal Flow Problem.; Year : 1980; author 1 : Zvi Galil;
No.4 idKey : journals/acta/CorradiniBV09; Title : Liveness of a mutex algorithm in a fair process algebra.; Year : 2009; author 1 : Valerio Bortolacci;
No.5 idKey : journals/acta/KumarR87; Title : A Linear Space Algorithm for the LCS Problem.; Year : 1987; author 1 : S. Ravi;
No.6 idKey : journals/acta/Hesselink13a; Title : A distributed resource allocation algorithm for many processes.; Year : 2013; author 1 : Albert R. Meyer;
No.7 idKey : journals/acta/Topor79; Title : The Correctness of the Schorr-Waite List Marking Algorithm.; Year : 1979; author 1 : Zvi Galil;
No.8 idKey : journals/acta/HinrichsNS92; Title : An All-Round Sweep Algorithm for 2-Dimensional Nearest-Neighbor Problems.; Year : 1992; author 1 : Norbert Hinrichs;
No.9 idKey : journals/acta/GareyG74; Title : Performance Bounds on the Splitting Algorithm for Binary Testing.; Year : 1974; author 1 : Michael J. Garey;
No.10 idKey : journals/acta/FischerM92; Title : A Simple, Fast, and Effective LL(1) Error Repair Algorithm.; Year : 1992; author 1 : Michael J. Fischer;
No.11 idKey : journals/acta/CohenR76; Title : On the Implementation of Strassen's Fast Multiplication Algorithm.; Year : 1976; author 1 : Richard P. Cohen;
No.12 idKey : journals/acta/HorwitzDT87; Title : An Efficient General Iterative Algorithm for Dataflow Analysis.; Year : 1987; author 1 : Daniel T. Horwitz;
No.13 idKey : journals/acta/Dail07; Title : An exact subexponential-time lattice algorithm for Asian options.; Year : 2007; author 1 : David A. Dail;
No.14 idKey : journals/acta/Szpankowski87; Title : An Analysis of a Contention Resolution Algorithm: Another Approach.; Year : 1987; author 1 : Andrzej Szpankowski;
No.15 idKey : journals/acta/NakatsuKY82; Title : A Longest Common Subsequence Algorithm Suitable for Similar Text Strings.; Year : 1982; author 1 : Y. Nakatsu;
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```

4. Spatial Search with keyword “algorithm”, skip 5 and then print first 15 results

search range is 2000 to 2015

```
Spatial Search 2 Search In Small Year Range
From Year 2000 to Year 2015
No.1 idKey : journals/acta/Dail07; Title : An exact subexponential-time lattice algorithm for Asian options.; Year : 2007; author 1 : David A. Dail;
No.2 idKey : journals/acta/MitranaT11; Title : New bounds for the query complexity of an algorithm that learns DFAs with respect to a distribution.; Year : 2011; author 1 : T. Mitrana;
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```