**CSCI-572 EXAM 2**

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1. Input Key:Value Pairs: (0:Data Science), (1:Data is Science)

 (The line offset is the key. The content of the line is the value.)

1. JAVA\_HOME should be added to PATH and HADOOP\_CLASSPATH should be set.

export PATH=${JAVA\_HOME}/bin:${PATH}

export HADOOP\_CLASSPATH=${JAVA\_HOME}/lib/tools.jar

1. “xxxxx”: Numbers denote which reducer wrote it out.
2. 1) Lacks typical per-directory data structure to list each file in the directory.

2) Does not support aliases (i.e. hard or sym links).

1. YES
2. Reserved Keyword: static

Access Specifier: public (optional)

1. Ad network: The key function of an ad network is aggregation of ad space supply from publishers and matching it with advertiser demand.

Ad exchange: An ad exchange is a technology platform that facilitates the buying and selling of media advertising inventory from "multiple” ad networks and the prices of that inventory are determined through technology-driven bidding.

1. Lower

(Keywords that present less competition also offer lower cost-per-click prices since few marketers are targeting them.)

1. b. likely less than $200.00
2. A. Modus Ponens: Given 2 hypotheses p and p->q, Modus Ponens states that if p and p->q are true, then the conclusion q is also true.

p

p->q

—-----

q

B. From fact #1, Rover barks and eats Alpo.

So, Rover is a dog (this is fact #5).

From #3, since Rover is a dog, Rover is brown (#6 is formed) which is what we require.

Hence shown.

1. solrconfig.xml
2. managed-schema
3. solrconfig.xml:

<listener event="newSearcher" class="org.apache.solr.schema.ExternalFileFieldReloader" />

<listener event="firstSearcher" class="org.apache.solr.schema.ExternalFileFieldReloader" />

managed-schema:

<fieldType name=”external” keyField=”id” defVal=”0” class=”solr.ExternalFileField”/>

<field name=”pageRankFile” type=”external” stored=”false” indexed=”false”/>

1. The root cause is that the user-defined Mapper and Reducer classes have to be defined as static classes; because they are not, we are facing this error.
2. a. & b.
3. Cognitive Error
4. A. Deletion => 1

B. Insertion => 1

C. Substitution => ( 1 => characters are different, 0 => characters are same}

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | # | S | P | U | R | S |
| # | 0 | 1 | 2 | 3 | 4 | 5 |
| P | 1 | 1 | 1 | 2 | 3 | 4 |
| A | 2 | 2 | 2 | 2 | 3 | 4 |
| C | 3 | 3 | 3 | 3 | 3 | 4 |
| E | 4 | 4 | 4 | 4 | 4 | 4 |
| R | 5 | 5 | 5 | 5 | 4 | 5 |
| S | 6 | 5 | 6 | 6 | 5 | 4 |

1. False
2. False
3. True
4. ​​1. intra-class similarity - should be high

2. inter-class similarity - should be low

1. a. [0,1]
2. [-1,1]
3. [0,1] ; in terms of %: 0 to 100%
4. • Morphological variants (having to do with inflections)

Eg. invented -> inventor -> inventions

• Lexical variants (similar to synonyms)

Eg. killer -> assassin

far -> distance

• Semantic variants

Eg. like -> prefer (a more specific or less specific term)

|  |  |  |
| --- | --- | --- |
| **Word** | **Relation** | **Example** |
| Breakfast | Hypernym | Meal |
| Meal | Hyponym | Dinner |
| Table | Meronym | Leg |
| Dinner | Holonym | Meal |
| Leader | Antonym | Follower |

1. Performer, person, living thing, whole, object, physical entity, entity
2. C
3. C1: (2,7)

C2: (28/3, 26/3) = (9.33,8.67)

1. L1 norm & Cosine Distance
2. D. Polygons
3. A. 3

B. -2

1. Search primarily based on:

• tags (FlickR, FaceBook)

* surrounding text

• using image feature

1. Similar Color Content (Correlogram & Autocorrelogram) & Color Layout
2. It was accomplished by collecting candidate images from the internet and cleaning up the candidate images by humans.