

Data linking and keys project

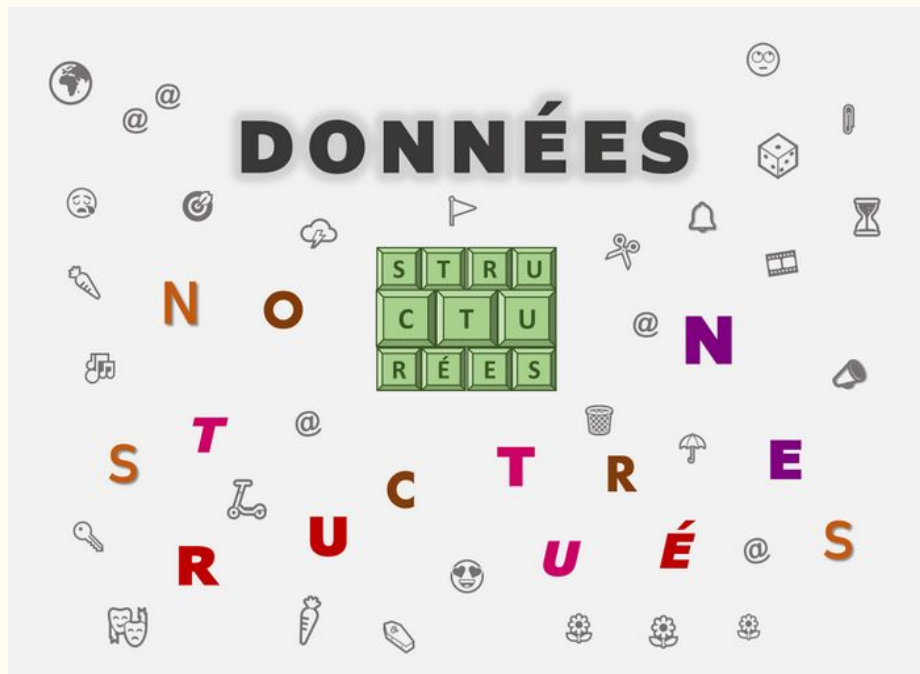
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Jean Mohamed Sawadago
Salma Damak

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- Analyse et prétraitement des données
- SAkey
- Limes
- Conclusion



Introduction

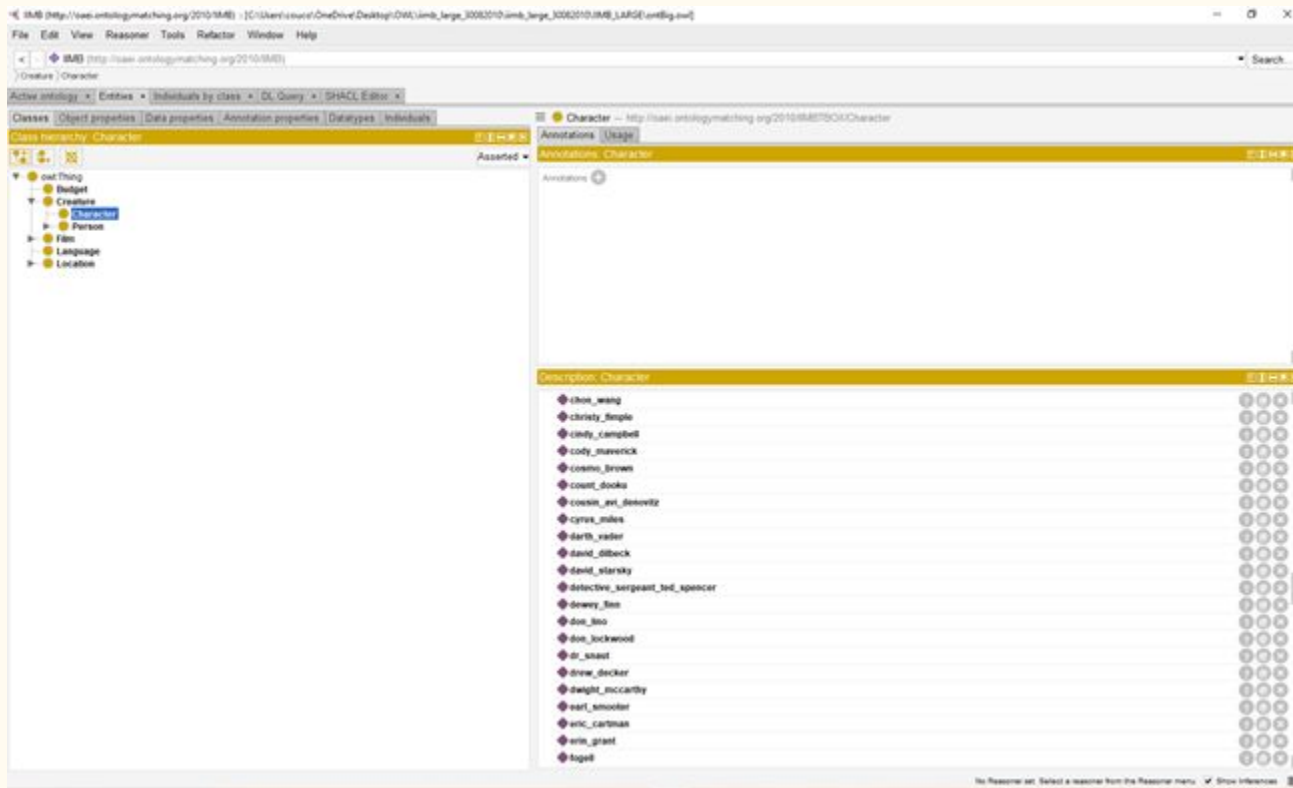


Analyse et prétraitement des données

IIMB CINÉMA BENCHMARK



Analyse et prétraitement des données



Analyse et prétraitement des données

- objectif : Réduire la taille des fichiers sans perdre d'informations
 - travail :
 - supprimer les propriétés non pertinentes
 - supprimer les redondances
 - supprimer les propriétés aberrantes
 - Comparaison par rapport à la grande base
-

Analyse et prétraitement des données

- supprimer les propriétés non pertinentes

Supprimer les propriétés avec des textes longs

- Si le nombre de mots total dans un article $>$ seuil : on supprime le texte.
- Si le nombre de mots total dans un article $<$ seuil : on garde le texte.

```
<owl:NamedIndividual rdf:about="http://oaei.ontologymatching.org/2010/IIMBDATA/en/item1950811789911340571">
  <rdf:type rdf:resource="http://oaei.ontologymatching.org/2010/IIMBTBOX/Location"/>
  <IIMBTBOX:size rdf:datatype="http://www.w3.org/2001/XMLSchema#double">726.5</IIMBTBOX:size>
  <IIMBTBOX:name rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Calgary</IIMBTBOX:name>
  <IIMBTBOX:article rdf:datatype="http://www.w3.org/2001/XMLSchema#string">0<pg>lgwawrkyk is hse aGgestcity Ointe jprinceF
XofX 8e2rtaRCaIn2a. c7 isLhxcateHd in he BskoutGh Yoffheovnce,d i R8rieinoff5othilsad ghn plns, raFAroximaEtl escst of7 front
rangwes t!9anadMicnq Rochkie.xaasayi tMtirdZrget civncsun?iipSaity bh pWbplBatioft,An CMnTad. s oZ tWhe 2a007 AcAvMc De2ss, gWlgg
&#39;st jpop2tI whaf 1,0e1r,4zK hLbmet6rplimsn pulatoZ5CMA)wra F1E,09,3 n20,pgaknA Gra2tecr Clgr! tde Lfth lcagest
cns2metcopolitn area?n h cononry. BeJcaGue itiA Fo!aSed30h0&amp;#65;&#6540;kitltmFetrPes (S1#654xuB;&#6540i;pmi)due out2h
if EdmHoUton, tatistiandeine thfar9w popWltereJ5i befwee tse cc2ie a thwe"Cgaprgy-EdmotJo pChorri3o. G1st 2is lMr2g1stn
Canaian mtr5opolitan drea nbetween Troto andIVantouvkr. L
A rs0idFZ oWf Cn4lgaE is6 Uknony aaryianU.
CmaEllay iweljRknwnasdesinti0on fobwntersprtaqecHotokrs1m uiPth3 !al nuXeofmajor m5nnti3nc resots ner ktlhe Zaiyf raELd1metrplPotn are
E9nolic cWtiviBtyJin CuklryJ s nmojsly otrd oX Athev 5etwoleuRm dustryowvr,7 rieultur 0toFurbism3,andt h-tec7hu nd3udshtHreJs2 ls
ntrbibe t 7hecit&#39;s,an oic gotei.p COag9azH h1Ks BaNny ajor SnnHul tivls hwph includxeX LCLxga0ry&lt;iR
</IIMBTBOX:article>
```

Active Windows

Analyse et prétraitement des données

- supprimer les propriétés non pertinentes
- supprimer les redondances

- Utilisation du fichier “refalign.rdf”.
- Intuition
- Utilisation du fichier “ontBig.owl”

```
<Cell>
  <entity1 rdf:resource="http://oaei.ontologymatching.org/2010/IIMBDATA/en/botswana"/>
  <entity2 rdf:resource="http://oaei.ontologymatching.org/2010/IIMBDATA/en/item1275791610320834728"/>
  <relation>=</relation>
  <measure rdf:datatype="http://www.w3.org/2001/XMLSchema#float">1.0</measure>
</Cell>
```

```
<owl:NamedIndividual rdf:about="http://oaei.ontologymatching.org/2010/IIMBDATA/en/ken_hutch_hutchinson";
  <rdf:type rdf:resource="http://oaei.ontologymatching.org/2010/IIMBTBOX/Character"/>
  <IIMBTBOX:name rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Ken &quot;Hutch&quot;&quot; H
  <IIMBTBOX:gender rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Male</IIMBTBOX:gender>
  <IIMBTBOX:acted_by rdf:resource="http://oaei.ontologymatching.org/2010/IIMBDATA/en/owen_wilson"/>
</owl:NamedIndividual>
```

```
<owl:NamedIndividual rdf:about="http://oaei.ontologymatching.org/2010/IIMBDATA/en/item20476684090
  <rdf:type rdf:resource="http://oaei.ontologymatching.org/2010/IIMBTBOX/Actor"/>
  <IIMBTBOX:date_of_birth rdf:datatype="http://www.w3.org/2001/XMLSchema#string">8/23/70</IIMBT
  <IIMBTBOX:name rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Jay Mohr</IIMBTBOX:name
  <IIMBTBOX:gender rdf:datatype="http://www.w3.org/2001/XMLSchema#string">M</IIMBTBOX:gender>
  <IIMBTBOX:article rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Z&gt;Jy Mohr7 7(bAuZ
```


Analyse et prétraitement des données

- supprimer les propriétés non pertinentes
- supprimer les redondances
- supprimer les propriétés aberrantes
 - Utilisation du fichier “ontBig.owl”

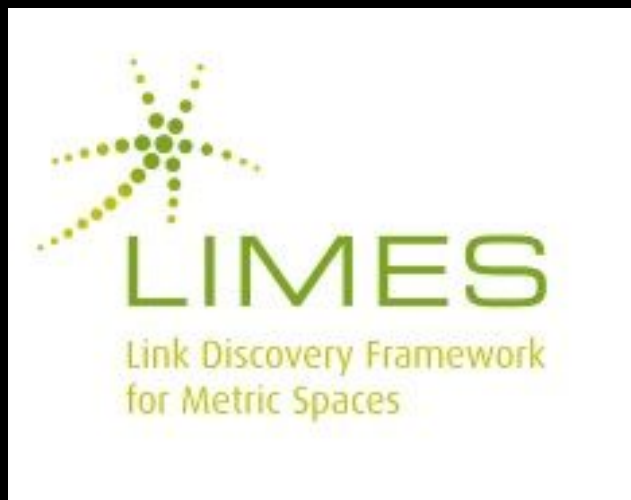
[illegible]

Analyse et prétraitement des données

- supprimer les propriétés non pertinentes
- supprimer les redondances
- supprimer les propriétés aberrantes
- Comparaison par rapport à la grande base

-
- Utilisation du fichier “ontBig.owl”
 - utilisation de “refalign.rdf”

LIMES



LIMES

```
<?xml version="1.0" encoding="UTF-8"?>
<!--Sample XML file generated by XMLSpy v2010 rel. 3 sp1 (http://www.altova.com)-->
<!DOCTYPE LIMES SYSTEM "limes.dtd">
<LIMES>
  <PREFIX>
    <NAMESPACE>http://www.w3.org/1999/02/22-rdf-syntax-ns#</NAMESPACE>
    <LABEL>rdf</LABEL>
  </PREFIX>
  <PREFIX>
    <NAMESPACE>http://www.w3.org/2000/01/rdf-schema#</NAMESPACE>
    <LABEL>rdfs</LABEL>
  </PREFIX>
  <PREFIX>
    <NAMESPACE>http://www.w3.org/2002/07/owl#</NAMESPACE>
    <LABEL>owl</LABEL>
  </PREFIX>
  <PREFIX>
    <NAMESPACE>http://oaei.ontologymatching.org/2010/IIMBTBOX/</NAMESPACE>
    <LABEL>imbt</LABEL>
  </PREFIX>

  <SOURCE>
    <ID>ontBig</ID>
    <ENDPOINT>C:\Users\couco\Downloads\LIMES.0.6.RC4-2\LIMES.0.6.RC4-2\Release_Examples\ontBig.nt</ENDPOINT>
    <VAR>?x</VAR>
    <PAGESIZE>5000</PAGESIZE>
    <RESTRICTION></RESTRICTION>
    <PROPERTY>imbt:name</PROPERTY>
    <TYPE>N-TRIPLES</TYPE>
  </SOURCE>

  <TARGET>
    <ID>output</ID>
    <ENDPOINT>C:\Users\couco\Downloads\LIMES.0.6.RC4-2\LIMES.0.6.RC4-2\Release_Examples\output_file.nt</ENDPOINT>
    <VAR>?y</VAR>
    <PAGESIZE>5000</PAGESIZE>
    <RESTRICTION></RESTRICTION>
    <PROPERTY>imbt:name</PROPERTY>
    <TYPE>N-TRIPLES</TYPE>
  </TARGET>
  <METRIC>jaro(x.imbt:name,y.imbt:name)</METRIC>
  <ACCEPTANCE>
    <THRESHOLD>0.9</THRESHOLD>
    <FILE>Projet_v1_big.nt</FILE>
    <RELATION>owl:sameAs</RELATION>
  </ACCEPTANCE>
  <REVIEW>
    <THRESHOLD>0.7</THRESHOLD>
    <FILE>Projet_v2_review_big.nt</FILE>
    <RELATION>owl:sameAs</RELATION>
  </REVIEW>
  <EXECUTION>Simple</EXECUTION>
  <OUTPUT>TTL</OUTPUT>
</LIMES>
```

LIMES

```
INFO [main] (PPJoinController.java:146) - Loading target data ...
INFO [main] (HybridCache.java:232) - Checking for file C:\Users\couco\Downloads\LIMES.0.6.RC4-2\LIMES.0.6.RC4-2\cache\1583074885.ser
INFO [main] (HybridCache.java:248) - No cached data found for output
INFO [main] (QueryModuleFactory.java:19) - Generating <n-triples> reader
INFO [main] (FileQueryModule.java:56) - RDF model read from C:\Users\couco\Downloads\LIMES.0.6.RC4-2\LIMES.0.6.RC4-2\Release_Examples\output_file.nt is of size 8678
INFO [main] (ModelRegistry.java:34) - Registry = [C:\Users\couco\Downloads\LIMES.0.6.RC4-2\LIMES.0.6.RC4-2\Release_Examples\ontBig.nt, C:\Users\couco\Downloads\LIMES.0.6.RC4-2\LIMES.0.6.RC4-2\Release_Examples\output_file.nt]
INFO [main] (SparqlQueryModule.java:93) - Properties are [imbt:name]
INFO [main] (SparqlQueryModule.java:139) - Query issued is
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX owl: <http://www.w3.org/2002/07/owl/#>
PREFIX imbt: <http://oaei.ontologymatching.org/2010/IIMBTBOX/>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
SELECT DISTINCT ?y ?v0
WHERE {
  ?y imbt:name ?v0 .
}
INFO [main] (SparqlQueryModule.java:141) - Querying the endpoint.
INFO [main] (SparqlQueryModule.java:149) - Getting statements 0 to 5000
INFO [main] (SparqlQueryModule.java:149) - Getting statements 5000 to 10000
INFO [main] (SparqlQueryModule.java:248) - Retrieved 1233 triples and 1233 entities.
INFO [main] (SparqlQueryModule.java:249) - Retrieving statements took 0.014 second s.
INFO [main] (HybridCache.java:179) - Serializing 1233 objects to C:\Users\couco\Downloads\LIMES.0.6.RC4-2\LIMES.0.6.RC4-2\cache\1583074885.ser
INFO [main] (PPJoinController.java:159) - Getting links ...
INFO [main] (JaroMapper.java:25) - Running JaroMapper
1649372 = 0.999879362573663
477723 = 0.2896043880499839
INFO [main] (PPJoinController.java:162) - Got links in 487ms.
INFO [main] (SerializerFactory.java:22) - Getting serializer with name TTL
INFO [main] (PPJoinController.java:172) - Using TtlSerializer to serialize
INFO [main] (PPJoinController.java:191) - Returned 1289 links above acceptance threshold.
INFO [main] (PPJoinController.java:192) - Returned 3912 links to review.
INFO [main] (PPJoinController.java:199) - Mapping carried out in 1.988 seconds
INFO [main] (PPJoinController.java:200) - Done.
```

LIMES

```
Project_bigint X keys.txt X ontBigint X
1 @prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
2 @prefix owl: <http://www.w3.org/2002/07/owl/#> .
3 @prefix imbt: <http://oaei.ontologymatching.org/2010/IMBTBOX/> .
4 @prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
5 <http://oaei.ontologymatching.org/2010/IMBOATA/en/vince_vaughn> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/vince_vaughn> .
6 <http://oaei.ontologymatching.org/2010/IMBOATA/en/comoros> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/comoros> .
7 <http://oaei.ontologymatching.org/2010/IMBOATA/en/port_vila> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/port_vila> .
8 <http://oaei.ontologymatching.org/2010/IMBOATA/en/glendale> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/glendale> .
9 <http://oaei.ontologymatching.org/2010/IMBOATA/en/winter_park> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/winter_park> .
10 <http://oaei.ontologymatching.org/2010/IMBOATA/en/stanley_tong> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/stanley_tong> .
11 <http://oaei.ontologymatching.org/2010/IMBOATA/en/ider_obsereira> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/ider_obsereira> .
12 <http://oaei.ontologymatching.org/2010/IMBOATA/en/brazzaville> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/brazzaville> .
13 <http://oaei.ontologymatching.org/2010/IMBOATA/en/james_dooan> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/james_dooan> .
14 <http://oaei.ontologymatching.org/2010/IMBOATA/en/sondra_pransky> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/sondra_pransky> .
15 <http://oaei.ontologymatching.org/2010/IMBOATA/en/berkeley_california> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/berkeley_california> .
16 <http://oaei.ontologymatching.org/2010/IMBOATA/en/sam_huntington> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/sam_huntington> .
17 <http://oaei.ontologymatching.org/2010/IMBOATA/en/laurence_olivier> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/laurence_olivier> .
18 <http://oaei.ontologymatching.org/2010/IMBOATA/en/ota_tokyo> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/ota_tokyo> .
19 <http://oaei.ontologymatching.org/2010/IMBOATA/en/ota_tokyo> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/ota_tokyo> .
20 <http://oaei.ontologymatching.org/2010/IMBOATA/en/mogadishu> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/mogadishu> .
21 <http://oaei.ontologymatching.org/2010/IMBOATA/en/judi_dench> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/judi_dench> .
22 <http://oaei.ontologymatching.org/2010/IMBOATA/en/shia_labeouf> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/shia_labeouf> .
23 <http://oaei.ontologymatching.org/2010/IMBOATA/en/erin_grant> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/erin_grant> .
24 <http://oaei.ontologymatching.org/2010/IMBOATA/en/leonard_nimoy> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/leonard_nimoy> .
25 <http://oaei.ontologymatching.org/2010/IMBOATA/en/phoenixville> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/phoenixville> .
26 <http://oaei.ontologymatching.org/2010/IMBOATA/en/landstuhl> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/landstuhl> .
27 <http://oaei.ontologymatching.org/2010/IMBOATA/m/0b6bjw3> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/m/0b6bjw3> .
28 <http://oaei.ontologymatching.org/2010/IMBOATA/en/belize> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/belize> .
29 <http://oaei.ontologymatching.org/2010/IMBOATA/en/hikaru_sulu> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/hikaru_sulu> .
30 <http://oaei.ontologymatching.org/2010/IMBOATA/en/havana> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/havana> .
31 <http://oaei.ontologymatching.org/2010/IMBOATA/en/queens> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/queens> .
32 <http://oaei.ontologymatching.org/2010/IMBOATA/en/ving_rhames> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/ving_rhames> .
33 <http://oaei.ontologymatching.org/2010/IMBOATA/en/bert_convyo> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/bert_convyo> .
34 <http://oaei.ontologymatching.org/2010/IMBOATA/en/zoe_washburne> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/zoe_washburne> .
35 <http://oaei.ontologymatching.org/2010/IMBOATA/en/jean_simmons> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/jean_simmons> .
36 <http://oaei.ontologymatching.org/2010/IMBOATA/en/baltimore> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/baltimore> .
37 <http://oaei.ontologymatching.org/2010/IMBOATA/en/australia> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/australia> .
38 <http://oaei.ontologymatching.org/2010/IMBOATA/en/australia> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/australia> .
39 <http://oaei.ontologymatching.org/2010/IMBOATA/en/andrew_mclaglen> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/andrew_mclaglen> .
40 <http://oaei.ontologymatching.org/2010/IMBOATA/en/dorking> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/dorking> .
41 <http://oaei.ontologymatching.org/2010/IMBOATA/en/spider-man> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/spider-man_3> .
42 <http://oaei.ontologymatching.org/2010/IMBOATA/en/spider-man> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/spider-man> .
43 <http://oaei.ontologymatching.org/2010/IMBOATA/en/lord_wessex> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/lord_wessex> .
44 <http://oaei.ontologymatching.org/2010/IMBOATA/en/eugene_levy> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/eugene_levy> .
45 <http://oaei.ontologymatching.org/2010/IMBOATA/en/barbados> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/barbados> .
46 <http://oaei.ontologymatching.org/2010/IMBOATA/en/darsh_vadher> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/darsh_vadher> .
47 <http://oaei.ontologymatching.org/2010/IMBOATA/en/memphis_tennessee> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/memphis_tennessee> .
48 <http://oaei.ontologymatching.org/2010/IMBOATA/en/stanley_donen> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/stanley_donen> .
49 <http://oaei.ontologymatching.org/2010/IMBOATA/en/windsor_ontario> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/windsor_ontario> .
50 <http://oaei.ontologymatching.org/2010/IMBOATA/en/shanghai_knights> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/shanghai_knights> .
51 <http://oaei.ontologymatching.org/2010/IMBOATA/en/kenley> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/kenley> .
52 <http://oaei.ontologymatching.org/2010/IMBOATA/en/dr_snaut> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/dr_snaut> .
53 <http://oaei.ontologymatching.org/2010/IMBOATA/en/scotland> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/scotland> .
54 <http://oaei.ontologymatching.org/2010/IMBOATA/en/charlie_yeung> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/charlie_yeung> .
55 <http://oaei.ontologymatching.org/2010/IMBOATA/en/islamabad> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/islamabad> .
56 <http://oaei.ontologymatching.org/2010/IMBOATA/en/dorothy_christy> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/dorothy_christy> .
57 <http://oaei.ontologymatching.org/2010/IMBOATA/m/0bthgtc> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/m/0bthgtc> .
58 <http://oaei.ontologymatching.org/2010/IMBOATA/en/steve_forrest> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/steve_forrest> .
59 <http://oaei.ontologymatching.org/2010/IMBOATA/en/olney> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/olney> .
60 <http://oaei.ontologymatching.org/2010/IMBOATA/en/marc_platt_1913> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/marc_platt_1913> .
61 <http://oaei.ontologymatching.org/2010/IMBOATA/en/alan_ladd> owl:sameAs <http://oaei.ontologymatching.org/2010/IMBOATA/en/alan_ladd> .
```


Sakey

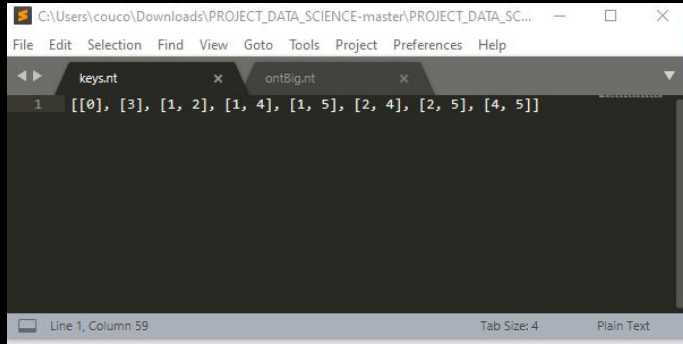
```
coucou@DESKTOP-QCOGVOM MINGW64 ~/Downloads/PROJECT_DATA_SCIENCE-master/PROJECT_DATA_SCIENCE-master/Keys-selection
```

```
$ java -jar SAKey.jar mmm.nt 1
```

```
1-non keys: [[http://oaei.ontologymatching.org/2010/iimbtbox/gender], [http://oaei.ontologymatching.org/2010/iimbtbox/currency], [http://oaei.ontologymatching.org/2010/iimbtbox/filmed_in], [http://oaei.ontologymatching.org/2010/iimbtbox/religion], [http://oaei.ontologymatching.org/2010/iimbtbox/born_in], [http://oaei.ontologymatching.org/2010/iimbtbox/form_of_government], [http://www.w3.org/2000/01/rdf-schema#subclasseof]]
```

```
0-almost keys:[[http://oaei.ontologymatching.org/2010/iimbtbox/gender, http://www.w3.org/2000/01/rdf-schema#subclassof], [http://oaei.ontologymatching.org/2010/iimbtbox/name], [http://oaei.ontologymatching.org/2010/iimbtbox/religion, http://www.w3.org/2000/01/rdf-schema#subclassof], [http://oaei.ontologymatching.org/2010/iimbtbox/religion, http://oaei.ontologymatching.org/2010/iimbtbox/form_of_government], [http://oaei.ontologymatching.org/2010/iimbtbox/gender, http://oaei.ontologymatching.org/2010/iimbtbox/form_of_government], [http://oaei.ontologymatching.org/2010/iimbtbox/born_in, http://oaei.ontologymatching.org/2010/iimbtbox/form_of_government], [http://oaei.ontologymatching.org/2010/iimbtbox/amount], [http://oaei.ontologymatching.org/2010/iimbtbox/currency, http://oaei.ontologymatching.org/2010/iimbtbox/born_in], [http://oaei.ontologymatching.org/2010/iimbtbox/date_of_birth], [http://oaei.ontologymatching.org/2010/iimbtbox/filmed_in, http://www.w3.org/2000/01/rdf-schema#subclassof], [http://oaei.ontologymatching.org/2010/iimbtbox/gender, http://oaei.ontologymatching.org/2010/iimbtbox/filmed_in], [http://oaei.ontologymatching.org/2010/iimbtbox/acted_by], [http://oaei.ontologymatching.org/2010/iimbtbox/article], [http://oaei.ontologymatching.org/2010/iimbtbox/dialect], [http://oaei.ontologymatching.org/2010/iimbtbox/currency, http://oaei.ontologymatching.org/2010/iimbtbox/religion], [http://oaei.ontologymatching.org/2010/iimbtbox/estimated_budget_used], [http://oaei.ontologymatching.org/2010/iimbtbox/born_in, http://www.w3.org/2000/01/rdf-schema#subclassof], [http://oaei.ontologymatching.org/2010/iimbtbox/score], [http://oaei.ontologymatching.org/2010/iimbtbox/filmed_in, http://oaei.ontologymatching.org/2010/iimbtbox/form_of_government], [http://oaei.ontologymatching.org/2010/iimbtbox/gender, http://oaei.ontologymatching.org/2010/iimbtbox/born_in], [http://oaei.ontologymatching.org/2010/iimbtbox/currency, http://oaei.ontologymatching.org/2010/iimbtbox/filmed_in], [http://oaei.ontologymatching.org/2010/iimbtbox/created_by], [http://oaei.ontologymatching.org/2010/iimbtbox/gender, http://oaei.ontologymatching.org/2010/iimbtbox/religion], [http://oaei.ontologymatching.org/2010/iimbtbox/form_of_government, http://www.w3.org/2000/01/rdf-schema#subclassof], [http://www.w3.org/2002/07/owl#inverseof], [http://oaei.ontologymatching.org/2010/iimbtbox/filmed_in, http://oaei.ontologymatching.org/2010/iimbtbox/born_in], [http://oaei.ontologymatching.org/2010/iimbtbox/currency, http://oaei.ontologymatching.org/2010/iimbtbox/gender], [http://oaei.ontologymatching.org/2010/iimbtbox/directed_by], [http://oaei.ontologymatching.org/2010/iimbtbox/calling_code], [http://oaei.ontologymatching.org/2010/iimbtbox/currency, http://www.w3.org/2000/01/rdf-schema#subclassof], [http://www.w3.org/2000/01/rdf-schema#subpropertyof], [http://oaei.ontologymatching.org/2010/iimbtbox/has_capital], [http://oaei.ontologymatching.org/2010/iimbtbox/filmed_in, http://oaei.ontologymatching.org/2010/iimbtbox/religion], [http://oaei.ontologymatching.org/2010/iimbtbox/religion, http://oaei.ontologymatching.org/2010/iimbtbox/born_in], [http://oaei.ontologymatching.org/2010/iimbtbox/starring_in], [http://oaei.ontologymatching.org/2010/iimbtbox/currency, http://oaei.ontologymatching.org/2010/iimbtbox/form_of_government], [http://oaei.ontologymatching.org/2010/iimbtbox/spoken_in], [http://oaei.ontologymatching.org/2010/iimbtbox/size]]
```

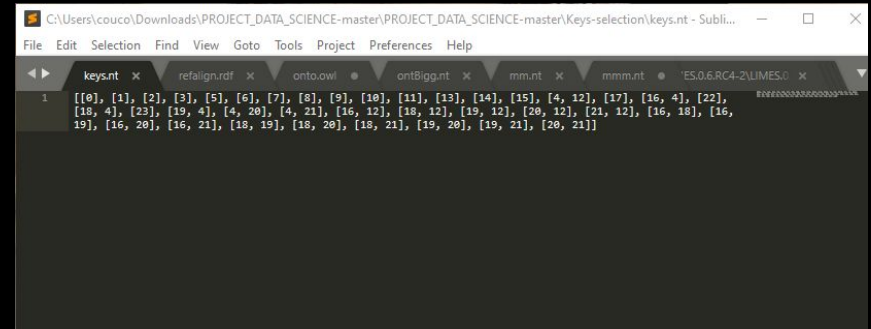
Sakey



```
1 [[0], [3], [1, 2], [1, 4], [1, 5], [2, 4], [2, 5], [4, 5]]
```

Fichier nt exemple

VS



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1 [[0], [1], [2], [3], [5], [6], [7], [8], [9], [10], [11], [13], [14], [15], [4, 12], [17], [16, 4], [22], [18, 4], [23], [19, 4], [4, 20], [4, 21], [16, 12], [18, 12], [19, 12], [20, 12], [21, 12], [16, 18], [16, 19], [16, 20], [16, 21], [18, 19], [18, 20], [18, 21], [19, 20], [19, 21], [20, 21]]
```

Fichier nt issu de
notre ontologie

Conclusion

Projet Bilan
Cross-Technologie
Facilité & Difficulté

