MULTILINGUAL QUESTION ANSWERING OVER LINKED DATA

QALD-3: Evaluation results

Workshop website: http://www.sc.cit-ec.uni-bielefeld.de/qald

Results[1] for DBpedia (test):

	Total	Processed	Right	Partially	Recall	Precision	F-measure
squall2sparql	99	96	77	13	0.85	0.89	**0.87**
CASIA	99	52	29	8	0.36	0.35	**0.36**
Scalewelis	99	70	32	1	0.33	0.33	**0.33**
RTV	99	55	30	4	0.34	0.32	**0.33**
Intui2	99	99	28	4	0.32	0.32	**0.32**
SWIP	99	21	14	2	0.15	0.16	**0.16**

Results[1] for MusicBrainz (test):

	Total	Processed	Right	Partially	Recall	Precision	F-measure
SWIP	50	33	24	2	0.51	0.51	**0.51**

DBpedia questions answered by all systems:

21	What is the capital of Canada?
22	Who is the governor of Wyoming?
30	What is the birth name of Angela Merkel?
68	How many employees does Google have?

DBpedia questions answered by no system:

14	Give me all members of Prodigy.
16	Does the new Battlestar Galactica series have more episodes than the old one?
92	Show me all songs from Bruce Springsteen released between 1980 and 1990.
96	Give me all B-sides of the Ramones.

---

[1]The column *processed* states for how many of the questions the system provided an answer, *right* specifies how many of these questions were answered with an F-measure of 1, and *partially* specifies how many of the questions were answered with an F-measure strictly between 0 and 1.

squall2sparql

Total	Processed	Right	Partially	Recall	Precision	F-measure
99	96	77	13	0.85	0.89	0.87

ID	Question	R	P	F
24	Who is the dbp:father of res:Elizabeth_II?	1.0	1.0	1.0
25	Which yago:StatesOfTheUnitedStates has the latest dbp:admittancedate?	1.0	1.0	1.0
26	How many officialLanguage-s of res:Seychelles are there?	1.0	1.0	1.0
27	res:Sean_Parnell is the dbp:governor of which yago:StatesOfTheUnitedStates?	1.0	1.0	1.0
20	What is the height of res:Michael_Jordan?	1.0	1.0	1.0
21	What is the capital of res:Canada?	1.0	1.0	1.0
22	Who is the dbp:governor of res:Wyoming?	1.0	1.0	1.0
23	Has 'Prince Harry' the same dbp:mother as 'Prince William'?	1.0	1.0	1.0
28	Give me all Film-s whose director is res:Francis_Ford_Coppola.	1.0	1.0	1.0
29	Give me all Person-s that are a starring of a Film a director and a starring of which is res:William_Shatner.	0.82	1.0	0.9
4	What is the numberOfStudents of res:Vrije_Universiteit?	1.0	1.0	1.0
8	What is a dbp:country of res:Himalayas?	1.0	1.0	1.0
59	Which yago:StatesOfTheUnitedStates share the dbp:timezone with res:Utah?	1.0	0.89	0.94
58	What is the dbp:timezone of res:Salt_Lake_City?	1.0	1.0	1.0
55	Which yago:GreekGoddesses have dbp:abode res:Mount_Olympus?	1.0	1.0	1.0
54	What are the dbp:nickname of res:San_Francisco?	1.0	1.0	1.0
57	Give me all Astronaut-s whose mission is res:Apollo_14.	1.0	1.0	1.0
56	Which ?date are res:Hells_Angels dbp:founded?	1.0	1.0	1.0
51	Give me all yago:FrisianIslands whose country is res:Netherlands.	1.0	1.0	1.0
50	Has res:Cuban_Missile_Crisis an earlier date than res:Bay_of_Pigs_Invasion?	1.0	1.0	1.0
53	What is the dbp:leaderParty of res:Lisbon?	1.0	1.0	1.0
52	OUT OF SCOPE	1.0	1.0	1.0
88	Which Film-s have starring and director res:Clint_Eastwood?	1.0	1.0	1.0
89	Which Place is the restingPlace of 'Juliana Netherlands'?	1.0	1.0	1.0
82	Give me all yago:AmericanInventions.	1.0	1.0	1.0
83	What is the elevation of res:Mount_Everest?	1.0	1.0	1.0
80	Give me all Book-s whose author is res:William_Goldman and whose numberOfPages is greater than 300.	1.0	1.0	1.0
81	Which Book-s has author res:Jack_Kerouac and has publisher res:Viking_Press?	1.0	1.0	1.0
86	What is the largestCity of res:Australia?	1.0	1.0	1.0
87	Who is the musicComposer of res:Harold_and_Maude?	1.0	1.0	1.0
84	Who is the creator of res:Captain_America?	1.0	1.0	1.0
85	What is the populationTotal of the capital of res:Australia?	1.0	1.0	1.0
3	Who is the leader of res:Berlin?	1.0	1.0	1.0
7	What is the dbp:admittancedate of res:Alberta?	1.0	1.0	1.0

100	Who has product res:Orangina?	1.0	1.0	1.0
39	Give me all Company-es whose location is res:Munich.	0.60	1.0	0.75
38	What is the populationTotal of res:Maribor?	1.0	1.0	1.0
33	Give me all Organisation-s whose type is res:Nonprofit_organization and whose location is res:Australia.	0.68	0.87	0.76
32	How many spouse-s of res:Nicole_Kidman are there?	1.0	1.0	1.0
31	Give me all yago:CurrentNationalLeaders whose dbp:religion is res:Methodism.	1.0	1.0	1.0
30	What is the dbp:birthName of res:Angela_Merkel?	1.0	1.0	1.0
35	Who is the developer of res:Minecraft?	1.0	1.0	1.0
34	What are the battle-s of res:T._E._Lawrence?	1.0	1.0	1.0
60	Give me all Lake-s whose country is res:Denmark.	0.8	1.0	0.89
61	How many SpaceMission-s are there?	1.0	1.0	1.0
62	Does res:Aristotle be-influencedBy res:Socrates?	1.0	1.0	1.0
63	Give me all Film-s whose country is res:Argentina.	0.12	1.0	0.22
64	Give me all LaunchPad-s whose operator is res:NASA.	1.0	1.0	1.0
65	What are the instrument-s of res:John_Lennon?	1.0	1.0	1.0
66	What has dbp:shipNamesake res:Benjamin_Franklin?	1.0	1.0	1.0
67	Who are the parent-s of the spouse of 'Juan Carlos I'?	1.0	1.0	1.0
68	What is the numberOfEmployees of res:Google?	1.0	1.0	1.0
69	Has 'Tesla' award 'Nobel Prize Physics'?	1.0	1.0	1.0
2	Who is the successor of res:John_F._Kennedy?	1.0	1.0	1.0
6	Give me all Person-s whose occupation is res:Skateboarding and whose (nationality or birthPlace) is res:Sweden.	0.5	1.0	0.67
99	What is the recordLabel of the Album whose artist is res:Elvis_Presley and whose releaseDate is the earliest?	1.0	1.0	1.0
98	What is the nationality of the creator of res:Miffy?	1.0	1.0	1.0
91	Which yago:StatesOfTheUnitedStates has dbp:postalabbreviation 'MN'?	1.0	1.0	1.0
90	What is the dbp:residence of res:Prime_Minister_of_Spain?	1.0	1.0	1.0
93	Which Film-s have director res:Akira_Kurosawa and have a later releaseDate than 'Rashomon'?	0.29	0.17	0.21
92	Give me all Song-s whose artist is res:Bruce_Springsteen and whose releaseDate has a year between 1980 and 1990.	0	0	0
95	Who is the dbp:author of the anthem of res:Poland?	1.0	1.0	1.0
94	What is the dbp:foundation of the dbp:brewery of res:Pilsner_Urquell?	1.0	1.0	1.0
97	Who is the dbp:artist of res:The_Storm_on_the_Sea_of_Galilee?	1.0	1.0	1.0
96	Give me all dbp:bSide of the Album-s whose artist is res:Ramones.	0	0	0
11	Which FormulaOneRacer has the highest races?	1.0	1.0	1.0
10	What is the dbp:strength of res:New_York_City_Fire_Department?	1.0	1.0	1.0
13	Which SoccerPlayer whose team has league res:Premier_League has the latest birthDate?	1.0	1.0	1.0
12	Give me all WorldHeritageSite whose dbp:year is between 2008 and 2013.	1.0	1.0	1.0
15	Which River has the highest dbp:length?	1.0	1.0	1.0
14	Give me all bandMember-s of res:Prodigy.	0	0	0
17	Give me all Automobile-s whose assembly is res:Germany.	0.42	0.66	0.51

16	Has the TelevisionShow that is a dbp:tv of res:Battlestar_Galactica and whose releaseDate is later than the releaseDate of a TelevisionShow ?X that is a dbp:tv of res:Battlestar_Galactica a greater numberOfEpisodes than ?X?	0	0	0
19	Give me all Person-s whose birthPlace is res:Vienna and whose deathPlace is res:Berlin.	0.67	1.0	0.8
48	Which Place-s whose country is res:United_Kingdom is the headquarter of res:Secret_Intelligence_Service?	1.0	1.0	1.0
49	Which Weapon shares the dbp:designer with res:Uzi?	1.0	0.5	0.67
46	Who has occupation res:Surfing and has birthPlace res:Philippines?	1.0	1.0	1.0
44	What are the city-es of res:Weser?	1.0	1.0	1.0
45	What are the country-es of res:Rhine?	1.0	1.0	1.0
42	Who is the dbp:spouse of res:Amanda_Palmer?	1.0	1.0	1.0
43	Give me all dbp:breed of res:German_Shepherd.	0	0	0
40	List all Game-s whose publisher is 'GMT'.	1.0	1.0	1.0
41	Who is res:Intel foundedBy?	1.0	1.0	1.0
1	Which Town that has country res:Germany has a populationTotal greater than 250000?	0.30	1.0	0.46
5	Which Mountain has the 2nd highest elevation?	1.0	1.0	1.0
9	Give me all Person-s whose instrument is res:Trumpet and whose occupation is res:Bandleader.	1.0	1.0	1.0
77	Who has dbp:nickname res:Scarface?	1.0	1.0	1.0
76	List the child-s of res:Margaret_Thatcher.	1.0	1.0	1.0
75	Which yago:DaughtersOfBritishEarls ?X have the deathPlace that is the birthPlace of ?X?	0.4	0.86	0.55
74	What is the deathDate of res:Michael_Jackson?	1.0	1.0	1.0
73	res:Benjamin_Franklin has how many child-s?	1.0	1.0	1.0
72	Which yago:StatesOfTheUnitedStates is the dbp:location of res:Fort_Knox?	0	0	0
71	What is the dbp:beginningDate of res:Statue_of_Liberty?	1.0	1.0	1.0
70	Is res:Michelle_Obama the spouse of res:Barack_Obama?	1.0	1.0	1.0
79	Has res:Dutch_Schultz dbp:ethnicity 'Jewish'?	1.0	1.0	1.0
78	Has res:Margaret_Thatcher profession res:Chemist?	1.0	1.0	1.0

CASIA

Total	Processed	Right	Partially	Recall	Precision	F-measure
99	52	29	8	0.36	0.35	0.36

ID	Question	R	P	F
56	When were the Hells Angels founded?	1.0	1.0	1.0
42	Who is the husband of Amanda Palmer?	1.0	1.0	1.0
60	Give me a list of all lakes in Denmark.	0.8	1.0	0.89
62	Did Socrates influence Aristotle?	1.0	1.0	1.0
89	In which city was the former Dutch queen Juliana buried?	0	0	0
64	Give me all launch pads operated by NASA.	1.0	0.8	0.89
65	Which instruments did John Lennon play?	1.0	1.0	1.0
67	Who are the parents of the wife of Juan Carlos I?	0.67	0.4	0.5
68	How many employees does Google have?	1.0	1.0	1.0
83	How high is the Mount Everest?	1.0	1.0	1.0
81	Which books by Kerouac were published by Viking Press?	1.0	1.0	1.0
86	What is the largest city in Australia?	1.0	1.0	1.0
53	What is the ruling party in Lisbon?	0	0	0
84	Who created the comic Captain America?	1.0	0.67	0.8
85	How many people live in the capital of Australia?	1.0	1.0	1.0
24	Who was the father of Queen Elizabeth II?	1.0	1.0	1.0
26	How many official languages are spoken on the Seychelles?	1.0	1.0	1.0
27	Sean Parnell is the governor of which U.S. state?	0	0	0
20	How tall is Michael Jordan?	0	0	0
21	What is the capital of Canada?	1.0	1.0	1.0
22	Who is the governor of Wyoming?	1.0	1.0	1.0
49	Which other weapons did the designer of the Uzi develop?	1.0	0.5	0.67
46	Which professional surfers were born on the Philippines?	0	0	0
45	Which countries are connected by the Rhine?	1.0	1.0	1.0
28	Give me all movies directed by Francis Ford Coppola.	1.0	1.0	1.0
43	Give me all breeds of the German Shepherd dog.	1.0	1.0	1.0
41	Who founded Intel?	1.0	1.0	1.0
3	Who is the mayor of Berlin?	1.0	1.0	1.0
2	Who was the successor of John F. Kennedy?	1.0	0.5	0.67
4	How many students does the Free University in Amsterdam have?	1.0	1.0	1.0
6	Give me all professional skateboarders from Sweden.	0	0	0
8	To which countries does the Himalayan mountain system extend?	0	0	0
32	How often did Nicole Kidman marry?	0	0	0
77	Who was called Scarface?	1.0	1.0	1.0
76	List the children of Margaret Thatcher.	1.0	1.0	1.0
75	Which daughters of British earls died in the same place they were born in?	0	0	0
74	When did Michael Jackson die?	1.0	1.0	1.0
73	How many children did Benjamin Franklin have?	0	0	0
70	Is Michelle Obama the wife of Barack Obama?	1.0	1.0	1.0

100	Who produces Orangina?	0	0	0
94	What is the founding year of the brewery that produces Pilsner Urquell?	0	0	0
97	Who painted The Storm on the Sea of Galilee?	1.0	1.0	1.0
39	Give me all companies in Munich.	0.39	1.0	0.56
38	How many inhabitants does Maribor have?	1.0	1.0	1.0
58	What is the time zone of Salt Lake City?	1.0	1.0	1.0
98	Which country does the creator of Miffy come from?	1.0	1.0	1.0
55	Which Greek goddesses dwelt on Mount Olympus?	0	0	0
54	What are the nicknames of San Francisco?	1.0	1.0	1.0
30	What is the birth name of Angela Merkel?	1.0	1.0	1.0
35	Who developed Minecraft?	1.0	1.0	1.0
19	Give me all people that were born in Vienna and died in Berlin.	0	0	0
48	In which UK city are the headquarters of the MI6?	0	0	0

Scalewelis

Total	Processed	Right	Partially	Recall	Precision	F-measure
99	70	32	1	0.33	0.33	0.33

ID	Question	R	P	F
56	When were the Hells Angels founded?	1.0	1.0	1.0
81	Which books by Kerouac were published by Viking Press?	0	0	0
53	What is the ruling party in Lisbon?	1.0	1.0	1.0
42	Who is the husband of Amanda Palmer?	1.0	1.0	1.0
62	Did Socrates influence Aristotle?	1.0	1.0	1.0
36	What is the melting point of copper?	0	0	0
60	Give me a list of all lakes in Denmark.	0	0	0
68	How many employees does Google have?	1.0	1.0	1.0
88	Which films starring Clint Eastwood did he direct himself?	0	0	0
63	Give me all Argentine films.	0	0	0
64	How many space missions have there been?	0	0	0
65	Which instruments did John Lennon play?	0	0	0
67	Who are the parents of the wife of Juan Carlos I?	0	0	0
82	Give me a list of all American inventions.	0	0	0
69	Did Tesla win a nobel prize in physics?	1.0	1.0	1.0
34	In which military conflicts did Lawrence of Arabia participate?	0	0	0
87	Who composed the music for Harold and Maude?	1.0	1.0	1.0
84	Who created the comic Captain America?	0	0	0
85	How many people live in the capital of Australia?	1.0	1.0	1.0
24	Who was the father of Queen Elizabeth II?	1.0	1.0	1.0
26	How many official languages are spoken on the Seychelles?	0	0	0
27	Sean Parnell is the governor of which U.S. state?	1.0	1.0	1.0
20	How tall is Michael Jordan?	0	0	0
21	What is the capital of Canada?	1.0	1.0	1.0
22	Who is the governor of Wyoming?	1.0	1.0	1.0
23	Do Prince Harry and Prince William have the same mother?	1.0	1.0	1.0
79	Was Dutch Schultz a jew?	1.0	1.0	1.0
44	Which cities does the Weser flow through?	0	0	0
45	Which countries are connected by the Rhine?	0	0	0
28	Give me all movies directed by Francis Ford Coppola.	0	0	0
29	Give me all actors starring in movies directed by and starring William Shatner.	0	0	0
41	Who founded Intel?	0	0	0
3	Who is the mayor of Berlin?	1.0	1.0	1.0
2	Who was the successor of John F. Kennedy?	0	0	0
4	How many students does the Free University in Amsterdam have?	1.0	1.0	1.0
7	When was Alberta admitted as province?	1.0	1.0	1.0
14	Give me all members of Prodigy.	0	0	0
9	Give me a list of all trumpet players that were bandleaders.	0	0	0

8	To which countries does the Himalayan mountain system extend?	0	0	0
78	Was Margaret Thatcher a chemist?	1.0	1.0	1.0
49	Which other weapons did the designer of the Uzi develop?	0	0	0
83	How high is the Mount Everest?	1.0	1.0	1.0
6	Give me all professional skateboarders from Sweden.	0	0	0
76	List the children of Margaret Thatcher.	0	0	0
74	When did Michael Jackson die?	1.0	1.0	1.0
73	How many children did Benjamin Franklin have?	0	0	0
72	In which U.S. state is Fort Knox located?	1.0	1.0	1.0
71	When was the Statue of Liberty built?	0	0	0
70	Is Michelle Obama de vrouw van Barack Obama?	1.0	1.0	1.0
91	Which U.S. state has the abbreviation MN?	1.0	1.0	1.0
100	Who produces Orangina?	1.0	1.0	1.0
94	What is the founding year of the brewery that produces Pilsner Urquell?	1.0	1.0	1.0
97	Who painted The Storm on the Sea of Galilee?	1.0	1.0	1.0
58	What is the time zone of Salt Lake City?	1.0	1.0	1.0
39	Give me all companies in Munich.	0	0	0
38	How many inhabitants does Maribor have?	0	0	0
59	Which U.S. states are in the same timezone as Utah?	0	0	0
48	In which UK city are the headquarters of the MI6?	0.5	1.0	0.67
98	Which country does the creator of Miffy come from?	1.0	1.0	1.0
19	Give me all people that were born in Vienna and died in Berlin.	0	0	0
54	What are the nicknames of San Francisco?	0	0	0
57	Give me the Apollo 14 astronauts.	0	0	0
30	What is the birth name of Angela Merkel?	1.0	1.0	1.0
50	Was the Cuban Missile Crisis earlier than the Bay of Pigs Invasion?	1.0	1.0	1.0
35	Who developed Minecraft?	0	0	0
52	Who invented the zipper?	0	0	0
55	Which Greek goddesses dwelt on Mount Olympus?	0	0	0
89	In which city was the former Dutch queen Juliana buried?	1.0	1.0	1.0
32	How often did Nicole Kidman marry?	1.0	1.0	1.0

RTV

Total	Processed	Right	Partially	Recall	Precision	F-measure
99	55	30	4	0.34	0.32	0.33

ID	Question	R	P	F
56	When were the Hells Angels founded?	0	0	0
42	Who is the husband of Amanda Palmer?	1.0	1.0	1.0
29	Give me all actors starring in movies directed by and starring William Shatner.	0	0	0
68	How many employees does Google have?	1.0	1.0	1.0
88	Which films starring Clint Eastwood did he direct himself?	0	0	0
89	In which city was the former Dutch queen Juliana buried?	1.0	0.5	0.67
64	Give me all launch pads operated by NASA.	0	0	0
65	Which instruments did John Lennon play?	1.0	1.0	1.0
100	Who produces Orangina?	1.0	1.0	1.0
83	How high is the Mount Everest?	1.0	1.0	1.0
81	Which books by Kerouac were published by Viking Press?	1.0	0.01	0.03
86	What is the largest city in Australia?	1.0	1.0	1.0
53	What is the ruling party in Lisbon?	0	0	0
84	Who created the comic Captain America?	1.0	1.0	1.0
24	Who was the father of Queen Elizabeth II?	0	0	0
26	How many official languages are spoken on the Seychelles?	1.0	1.0	1.0
20	How tall is Michael Jordan?	1.0	1.0	1.0
21	What is the capital of Canada?	1.0	1.0	1.0
22	Who is the governor of Wyoming?	1.0	1.0	1.0
47	What is the average temperature on Hawaii?	0	0	0
44	Which cities does the Weser flow through?	1.0	1.0	1.0
45	Which countries are connected by the Rhine?	1.0	1.0	1.0
28	Give me all movies directed by Francis Ford Coppola.	1.0	1.0	1.0
43	Give me all breeds of the German Shepherd dog.	1.0	1.0	1.0
41	Who founded Intel?	0	0	0
3	Who is the mayor of Berlin?	0	0	0
2	Who was the successor of John F. Kennedy?	0	0	0
79	Was Dutch Schultz a jew?	1.0	1.0	1.0
7	When was Alberta admitted as province?	0	0	0
8	To which countries does the Himalayan mountain system extend?	0	0	0
39	Give me all companies in Munich.	0	0	0
77	Who was called Scarface?	1.0	1.0	1.0
76	List the children of Margaret Thatcher.	1.0	1.0	1.0
74	When did Michael Jackson die?	1.0	1.0	1.0
73	How many children did Benjamin Franklin have?	1.0	1.0	1.0
72	In which U.S. state is Fort Knox located?	1.0	1.0	1.0
71	When was the Statue of Liberty built?	1.0	1.0	1.0
70	Michelle Obama is the wife of Barack Obama?	1.0	1.0	1.0

93	Which movies did Kurosawa direct after Rashomon?	0	0	0
94	What is the founding year of the brewery that produces Pilsner Urquell?	0	0	0
97	Who painted The Storm on the Sea of Galilee?	1.0	1.0	1.0
13	Who is the youngest player in the Premier League?	0	0	0
38	How many inhabitants does Maribor have?	1.0	1.0	1.0
59	Which U.S. states are in the same timezone as Utah?	0	0	0
58	What is the time zone of Salt Lake City?	1.0	1.0	1.0
17	Give me all cars that are produced in Germany.	0.42	0.66	0.51
55	Which Greek goddesses dwelt on Mount Olympus?	0	0	0
54	What are the nicknames of San Francisco?	1.0	1.0	1.0
57	Give me the Apollo 14 astronauts.	1.0	1.0	1.0
30	What is the birth name of Angela Merkel?	1.0	1.0	1.0
37	Give me all sister cities of Brno.	0	0	0
62	Did Socrates influence Aristotle?	1.0	1.0	1.0
35	Who developed Minecraft?	0	0	0
33	Give me all Australian nonprofit organizations.	0	0	0
32	How often did Nicole Kidman marry?	1.0	1.0	1.0

Intui2

Total	Processed	Right	Partially	Recall	Precision	F-measure
99	99	28	4	0.32	0.32	0.32

ID	Question	R	P	F
24	Who was the father of Queen Elizabeth II?	1.0	0.5	0.67
25	Which U.S. state has been admitted latest?	0	0	0
26	How many official languages are spoken on the Seychelles?	0	0	0
27	Sean Parnell is the governor of which U.S. state?	0	0	0
20	How tall is Michael Jordan?	0	0	0
21	What is the capital of Canada?	1.0	1.0	1.0
22	Who is the governor of Wyoming?	1.0	1.0	1.0
23	Do Prince Harry and Prince William have the same mother?	0	0	0
28	Give me all movies directed by Francis Ford Coppola.	1.0	1.0	1.0
29	Give me all actors starring in movies directed by and starring William Shatner.	0.09	1.0	0.17
4	How many students does the Free University in Amsterdam have?	0	0	0
8	To which countries does the Himalayan mountain system extend?	0	0	0
59	Which U.S. states are in the same timezone as Utah?	0	0	0
58	What is the time zone of Salt Lake City?	1.0	1.0	1.0
55	Which Greek goddesses dwelt on Mount Olympus?	0	0	0
54	What are the nicknames of San Francisco?	1.0	1.0	1.0
57	Give me the Apollo 14 astronauts.	0	0	0
56	When were the Hells Angels founded?	1.0	1.0	1.0
51	Give me all Frisian islands that belong to the Netherlands.	0	0	0
50	Was the Cuban Missile Crisis earlier than the Bay of Pigs Invasion?	0	0	0
53	What is the ruling party in Lisbon?	1.0	1.0	1.0
52	Who invented the zipper?	1.0	1.0	1.0
88	Which films starring Clint Eastwood did he direct himself?	0	0	0
89	In which city was the former Dutch queen Juliana buried?	0	0	0
82	Give me a list of all American inventions.	0	0	0
83	How high is the Mount Everest?	0	0	0
80	Give me all books by William Goldman with more than 300 pages.	0	0	0
81	Which books by Kerouac were published by Viking Press?	0	0	0
86	What is the largest city in Australia?	1.0	1.0	1.0
87	Who composed the music for Harold and Maude?	1.0	1.0	1.0
84	Who created the comic Captain America?	1.0	1.0	1.0
85	How many people live in the capital of Australia?	1.0	1.0	1.0
3	Who is the mayor of Berlin?	1.0	1.0	1.0
7	When was Alberta admitted as province?	0	0	0
100	Who produces Orangina?	1.0	1.0	1.0
39	Give me all companies in Munich.	0	0	0
38	How many inhabitants does Maribor have?	1.0	1.0	1.0
33	Give me all Australian nonprofit organizations.	0	0	0

32	How often did Nicole Kidman marry?	0	0	0
31	Give me all current Methodist national leaders.	0	0	0
30	What is the birth name of Angela Merkel?	1.0	1.0	1.0
37	Give me all sister cities of Brno.	1.0	1.0	1.0
36	What is the melting point of copper?	1.0	1.0	1.0
35	Who developed Minecraft?	1.0	1.0	1.0
34	In which military conflicts did Lawrence of Arabia participate?	0	0	0
60	Give me a list of all lakes in Denmark.	0	0	0
61	How many space missions have there been?	0	0	0
62	Did Socrates influence Aristotle?	0	0	0
63	Give me all Argentine films.	0	0	0
64	Give me all launch pads operated by NASA.	0	0	0
65	Which instruments did John Lennon play?	1.0	1.0	1.0
66	Which ships were called after Benjamin Franklin?	0	0	0
67	Who are the parents of the wife of Juan Carlos I?	0	0	0
68	How many employees does Google have?	1.0	1.0	1.0
69	Did Tesla win a nobel prize in physics?	0	0	0
2	Who was the successor of John F. Kennedy?	1.0	1.0	1.0
6	Give me all professional skateboarders from Sweden.	0	0	0
99	For which label did Elvis record his first album?	0	0	0
98	Which country does the creator of Miffy come from?	0	0	0
91	Which U.S. state has the abbreviation MN?	0	0	0
90	Where is the residence of the prime minister of Spain?	0	0	0
93	Which movies did Kurosawa direct after Rashomon?	0	0	0
92	Show me all songs from Bruce Springsteen released between 1980 and 1990.	0	0	0
95	Who wrote the lyrics for the Polish national anthem?	1.0	1.0	1.0
94	What is the founding year of the brewery that produces Pilsner Urquell?	1.0	1.0	1.0
97	Who painted The Storm on the Sea of Galilee?	0	0	0
96	Give me all B-sides of the Ramones.	0	0	0
11	Who is the Formula 1 race driver with the most races?	0	0	0
10	What is the total amount of men and women serving in the FDNY?	0	0	0
13	Who is the youngest player in the Premier League?	0	0	0
12	Give me all world heritage sites designated within the past five years.	0	0	0
15	What is the longest river?	0	0	0
14	Give me all members of Prodigy.	0	0	0
17	Give me all cars that are produced in Germany.	0	0	0
16	Does the new Battlestar Galactica series have more episodes than the old one?	0	0	0
19	Give me all people that were born in Vienna and died in Berlin.	0	0	0
48	In which UK city are the headquarters of the MI6?	1.0	0.67	0.8
49	Which other weapons did the designer of the Uzi develop?	0	0	0
46	Which professional surfers were born on the Philippines?	0	0	0
47	What is the average temperature on Hawaii?	1.0	1.0	1.0
44	Which cities does the Weser flow through?	0	0	0
45	Which countries are connected by the Rhine?	0	0	0
42	Who is the husband of Amanda Palmer?	1.0	1.0	1.0

43	Give me all breeds of the German Shepherd dog.	1.0	1.0	1.0
40	List all games by GMT.	0	0	0
41	Who founded Intel?	1.0	1.0	1.0
1	Which German cities have more than 250000 inhabitants?	0	0	0
5	What is the second highest mountain on Earth?	0	0	0
9	Give me a list of all trumpet players that were bandleaders.	0	0	0
77	Who was called Scarface?	1.0	1.0	1.0
76	List the children of Margaret Thatcher.	1.0	1.0	1.0
75	Which daughters of British earls died in the same place they were born in?	0	0	0
74	When did Michael Jackson die?	0	0	0
73	How many children did Benjamin Franklin have?	0	0	0
72	In which U.S. state is Fort Knox located?	0	0	0
71	When was the Statue of Liberty built?	0	0	0
70	Is Michelle Obama the wife of Barack Obama?	0	0	0
79	Was Dutch Schultz a jew?	0	0	0
78	Was Margaret Thatcher a chemist?	0	0	0

SWIP

DBpedia

Total	Processed	Right	Partially	Recall	Precision	F-measure
99	21	14	2	0.15	0.16	0.16

ID	Question	R	P	F
39	Give me all companies in Munich.	0.76	1.0	0.87
38	How many inhabitants does Maribor have?	1.0	1.0	1.0
20	How tall is Michael Jordan?	0	0	0
21	What is the capital of Canada?	1.0	1.0	1.0
22	Who is the governor of Wyoming?	1.0	1.0	1.0
19	Give me all people that were born in Vienna and died in Berlin.	1.0	1.0	1.0
54	What are the nicknames of San Francisco?	0	0	0
30	What is the birth name of Angela Merkel?	1.0	1.0	1.0
37	Give me all sister cities of Brno.	0	0	0
3	Who is the mayor of Berlin?	0	0	0
42	Who is the husband of Amanda Palmer?	0	0	0
28	Give me all movies directed by Francis Ford Coppola.	1.0	1.0	1.0
88	Which films starring Clint Eastwood did he direct himself?	1.0	1.0	1.0
63	Give me all Argentine films.	0.12	1.0	0.22
65	Which instruments did John Lennon play?	1.0	1.0	1.0
70	Is Michelle Obama the wife of Barack Obama?	1.0	1.0	1.0
68	How many employees does Google have?	1.0	1.0	1.0
45	Which countries are connected by the Rhine?	1.0	1.0	1.0
86	What is the largest city in Australia?	1.0	1.0	1.0
84	Who created the comic Captain America?	1.0	1.0	1.0
85	How many people live in the capital of Australia?	1.0	1.0	1.0

SWIP

MusicBrainz

Total	Processed	Right	Partially	Recall	Precision	F-measure
50	33	24	2	0.51	0.51	0.51

ID	Question	R	P	F
42	How many live albums by Elvis Presley are there?	1.0	1.0	1.0
24	Which compilations contain the song Last Christmas?	1.0	1.0	1.0
25	How long is the song This Magic Moment by Lou Reed?	1.0	1.0	1.0
26	Give me all singles by Donovan.	1.0	1.0	1.0
21	How many singles did Brian Eno record?	1.0	1.0	1.0
48	Give me all soundtracks composed by the Pet Shop Boys.	0.5	1.0	0.67
46	Give me the titles of all singles by Phil Collins.	0	0	0
28	By whom is the song Everlong?	1.0	1.0	1.0
41	Which albums of Elvis Presley have Elvis in their title?	1.0	0.42	0.6
1	Which groups were founded in 1924?	1.0	1.0	1.0
2	Who produced the album Dookie?	1.0	1.0	1.0
5	How many tracks does Erotica have?	1.0	1.0	1.0
6	Who composed the soundtrack for Blade Runner?	1.0	1.0	1.0
9	Who is the singer on the album The Dark Side of the Moon?	1.0	1.0	1.0
8	Is Bugs a track on the album Vitalogy?	1.0	1.0	1.0
13	Was the album Coming Home created by Lionel Richie?	1.0	1.0	1.0
14	How many singles did the Scorpions release?	1.0	1.0	1.0
11	How long is Louder Than Words by Against All Authority?	0	0	0
39	Does the song Peggy Sue appear on Buddy Holly's Greatest Hits compilation?	0	0	0
38	On which albums does the song Because You Loved Me appear?	1.0	1.0	1.0
15	Who composed the song Coast to Coast?	0	0	0
22	How often did Madonna marry?	1.0	1.0	1.0
17	By whom is the single Pure Morning?	1.0	1.0	1.0
16	Which bands broke up in 2000?	1.0	1.0	1.0
33	When were the Dixie Chicks founded?	1.0	1.0	1.0
18	Who produced the albums Out of Time and Automatic for the People?	1.0	1.0	1.0
31	When did Ludwig van Beethoven die?	1.0	1.0	1.0
30	Who was Whitney Houston's husband?	1.0	1.0	1.0
51	Did Kylie Minogue ever collaborate with Mariah Carey?	0	0	0
35	How many children did Bob Marley have?	1.0	1.0	1.0
34	When was That Which Remains founded?	1.0	1.0	1.0
19	With whom did Phil Collins work together?	0	0	0
32	How many pieces of work did Mozart create?	0	0	0