

# SPARQL for Wikidata

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# Talking to Wikidata in its native language

Adapted from [Nikolaas Tinbergen](#)



Wikidata

@wikidata

Have you written your own SPARQL query yet?

Huh? What's SPARQL?

31%

I adapted an example

24%

Yeah but it was hard

14%

**Yes and I owned it! ✓**

**32%**

85 Votes • Endergebnisse

10:29 vorm. · 30 Juni 16

# Where can I find more help

- **Ask a Wikidata friend for links and advice**
- [Wikidata:Request a query](#)
- [Wikidata: Project Chat](#) / [Mailing list](#) / Social media
- Wikiprojects / Queries
- [Mediawiki: SPARQL Query Examples](#)
- [Wikidata:SPARQL query service/queries](#)

# Getting information from first-order items

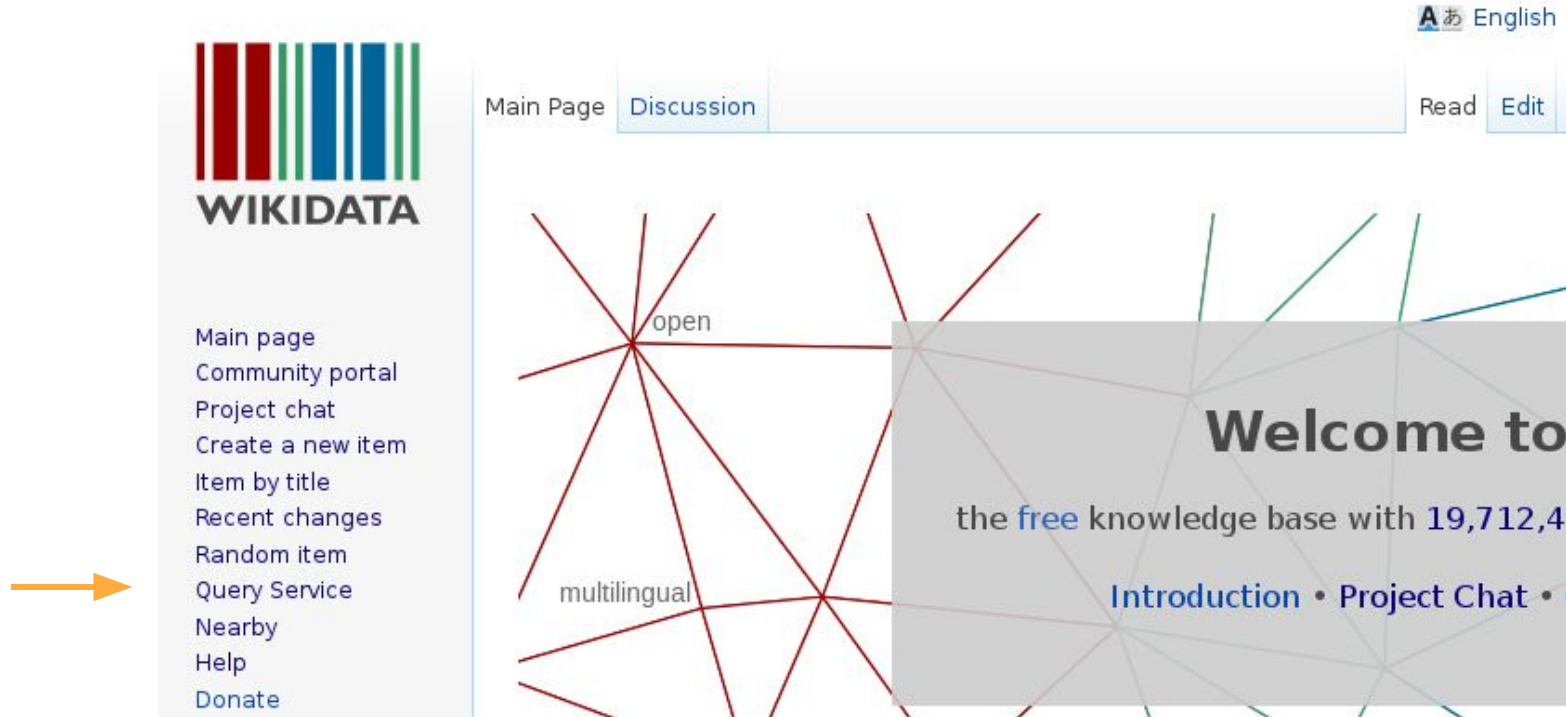
ISBN

ISBN

ISBN

ISBN

# Open the query interface: query.wikidata.org



The image shows a screenshot of the Wikidata website. On the left is a sidebar with the Wikidata logo (a grid of colored vertical bars) and the text "WIKIDATA". Below the logo is a list of navigation links: "Main page", "Community portal", "Project chat", "Create a new item", "Item by title", "Recent changes", "Random item", "Query Service", "Nearby", "Help", and "Donate". An orange arrow points to the "Query Service" link. At the top right of the page, there is a language selector showing "English" and buttons for "Read" and "Edit". Below the navigation tabs, there is a large graphic with a network of red and green lines. The word "open" is written in red above a central node, and "multilingual" is written in red below another node. A semi-transparent grey box is overlaid on the right side of the graphic, containing the text "Welcome to the free knowledge base with 19,712,4" and a list of links: "Introduction • Project Chat •".

English

Main Page Discussion Read Edit

WIKIDATA

Main page  
Community portal  
Project chat  
Create a new item  
Item by title  
Recent changes  
Random item  
Query Service  
Nearby  
Help  
Donate

open

multilingual

Welcome to  
the free knowledge base with 19,712,4  
Introduction • Project Chat •

# Learn from the existing examples



A screenshot of the Wikidata Query Service interface. The top navigation bar includes the Wikidata logo, the text 'Wikidata Query Service', and several menu items: 'Examples' (highlighted with an orange arrow), 'Prefixes', 'Tools', and 'Help'. On the right side of the navigation bar, there is a language selector showing 'English'. Below the navigation bar is a large text input area with the placeholder text '(Input a SPARQL query or choose a query example)'. At the bottom left of the input area, there is a small icon of a document with a link. At the bottom right of the input area, there is a status indicator that says 'Data updated a few seconds ago'. Below the input area, there are two buttons: a blue 'Run' button and a grey 'Clear' button. At the very bottom left, there is a small instruction: 'Press [CTRL-SPACE] to activate auto completion.'

# Easiest example: Select all values

Wikidata Query Service

Examples Prefixes Tools Help English

```
1 # Select all ISBNs
2 SELECT ?item ?value WHERE {
3   ?item wdt:P212 ?value .
4 }
```

Find anything

Show ISBN-13

Limit

Press [CTRL-SPACE] to activate auto completion. Data updated a few seconds ago

Run Clear 13810 Results in 712 ms Display Download Link

Search

item	value
<a href="#">wd:Q6507</a>	978-0-14-118126-4
<a href="#">wd:Q11880</a>	978-84-316-6022-2
<a href="#">wd:Q31385</a>	978-0-307-23769-9



# What do these triplets mean?

How the Mind Works

(Q2621068)

?item

No description defined

edit

▼ In more languages

Language	Label	Description	Also known as
English	How the Mind Works	No description defined	

P212

ISBN-13

978-0-393-04535-2

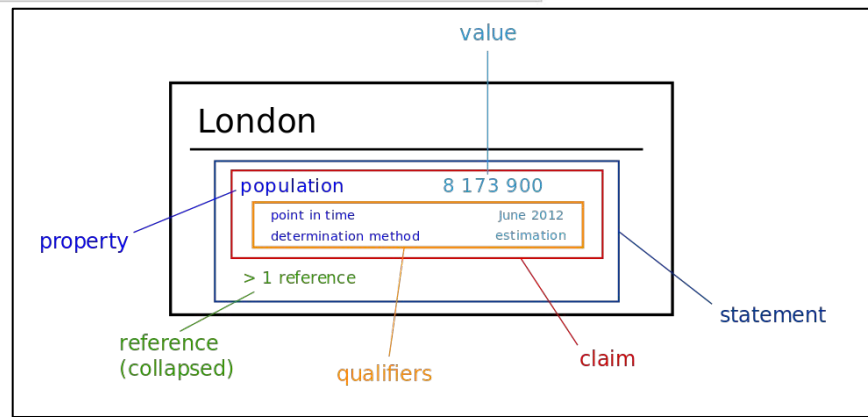
?value

edit

▶ 1 reference

+ add

```
SELECT ?item ?value ?itemLabel WHERE {  
  ?item wdt:P212 ?value .  
}
```



# Or just the item with a specific ISBN?

Wikidata Query Service

Examples Prefixes Tools Help English

```
1 # Select all ISBNs
2 SELECT ?item ?value WHERE {
3   ?item wdt:P212 '978-0-14-118126-4' .
4   ?item wdt:P212 ?value .
5 }
```

Find ISBN-13 "978-0-14-118126-4"

Show ISBN-13

Limit

Press [CTRL-SPACE] to activate auto completion. Data updated a few seconds ago

Run Clear 1 Results in 280 ms Display Download Link

item	value
<a href="#">wd:Q6507</a>	978-0-14-118126-4

# But what about labels?

Wikidata Query Service

Examples Prefixes Tools Help English

```
1 # Select all ISBNs
2 SELECT ?item ?value ?itemLabel WHERE {
3   ?item wdt:P212 '978-0-14-118126-4' .
4   ?item wdt:P212 ?value .
5   SERVICE wikibase:label {
6     bd:serviceParam wikibase:language "en"
7   }
8 }
```

Find ISBN-13 "978-0-14-118126-4"

Show ISBN-13

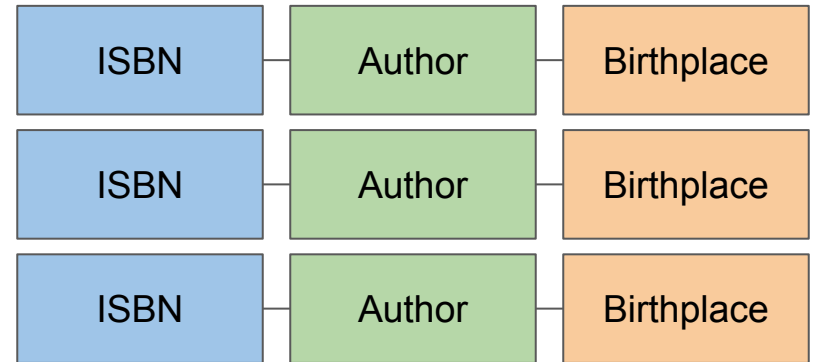
Limit

Press [CTRL-SPACE] to activate auto completion. Data updated a few seconds ago

Run Clear 1 Results in 182 ms Display Download Link

item	value	itemLabel
<a href="#">wd:Q6507</a>	978-0-14-118126-4	Finnegans Wake

# Getting information from n-order items



# Now, let us get the authors (p50)



The screenshot shows the Wikidata Query Service interface. At the top, there is a navigation bar with the Wikidata logo, the text "Wikidata Query Service", and several menu items: "Examples", "Prefixes", "Tools", and "Help". On the right side of the navigation bar, there is a language selector showing "English".

The main area contains a SPARQL query editor with the following code:

```
1 # Select items that have an ISBN and an author
2 SELECT ?item ?itemLabel ?author ?authorLabel WHERE {
3   ?item wdt:P212 ?any .
4   ?item wdt:P50 ?author .
5   SERVICE wikibase:label { bd:serviceParam wikibase:language "en" }
6 }
```

To the right of the query editor is a configuration panel with a search bar containing "anything", a "Show" button, and a "Limit" field. Below the query editor, there is a status bar that says "Press [CTRL-SPACE] to activate auto completion." and "Data updated 2 minutes ago". At the bottom, there are buttons for "Run", "Clear", and a status indicator showing "11198 Results in 6451 ms". On the right side of the bottom bar, there are buttons for "Display", "Download", and "Link".

# And the authors birth place (p)

Wikidata Query Service

Examples Prefixes Tools Help English

```
1 # Select items that have an ISBN and an author, and its birth place
2 SELECT ?item ?itemLabel ?authorLabel ?placeLabel WHERE {
3   ?item wdt:P212 ?any .
4   ?item wdt:P50 ?author .
5   ?author wdt:P19 ?place .
6   SERVICE wikibase:label { bd:serviceParam wikibase:language "en" }
7 }
8 LIMIT 100
```

Find anything

Show author , place of birth

Limit 100

# And finally the country of the birth place!

Wikidata Query Service

Examples Prefixes Tools Help English

```
1 # Select items that have an ISBN and an author, and its birth place
2 SELECT ?item ?itemLabel ?authorLabel ?placeLabel WHERE {
3   ?item wdt:P212 ?any.
4   ?item wdt:P50 ?author.
5   ?author wdt:P19 ?place.
6   ?place wdt:P17 wd:Q399.
7   SERVICE wikibase:label { bd:serviceParam wikibase:language "en". }
8 }
```

Find country Armenia

Show author , place of birth

Limit

One more advanced query



# Get coordinates for a map

Wikidata Query Service

Examples Prefixes Tools Help English

```
1 # Select items that have an ISBN and an author, a
2 SELECT ?item ?itemLabel ?authorLabel
3        ?placeLabel ?coord
4 WHERE {
5   ?item wdt:P212 ?any.
6   ?item wdt:P50 ?author.
7   ?author wdt:P19 ?place.
8   ?place wdt:P625 ?coord .
9   SERVICE wikibase:label {
10    bd:serviceParam wikibase:language "en".
11  }
12 }
```

Find anything

Show author , place of birth , coordinate location

Limit