

## Part I

# Sparql Endpoint :

<https://id.nlm.nih.gov/mesh/sparql>

## 1 Graphs research

### 1.1 Queries for graphs and results

graph all\_graphs\_included.sparql : 1 results

graph graphs\_with\_a\_triple\_min.sparql : 15 results

graph graphs\_with\_rdf\_type.sparql : 13 results

The graphs\_with\_a\_triple\_min.sparql returns more results (15)

### 1.2 List of graphs selected

graph 1 - <http://www.openlinksw.com/schemas/virtrdf#>

graph 2 - <http://id.nlm.nih.gov/mesh/vocab>

graph 3 - <http://id.nlm.nih.gov/mesh/sparql>

graph 4 - <http://id.nlm.nih.gov/mesh/2015>

graph 5 - <http://id.nlm.nih.gov/mesh/2016>

graph 6 - <http://id.nlm.nih.gov/mesh/2017>

graph 7 - <http://id.nlm.nih.gov/mesh/2018>

graph 8 - <http://id.nlm.nih.gov/mesh/2019>

graph 9 - <http://id.nlm.nih.gov/mesh/2020>

graph 10 - <http://id.nlm.nih.gov/mesh/2021>

graph 11 - <http://id.nlm.nih.gov/mesh>

graph 12 - <http://id.nlm.nih.gov/mesh/2022>

graph 13 - <http://id.nlm.nih.gov/mesh/void>

graph 14 - <http://localhost:8890/DAV/>

graph 15 - <http://www.w3.org/ns/ldp#>

## 2 Querying <https://id.nlm.nih.gov/mesh/sparql>

### 2.1 Results by query

Query class.sparql - distinct results : 35

Query property.sparql - distinct results : 174

Query label\_class.sparql - distinct results : 0

Query label\_property.sparql - distinct results : 0

Query subclass.sparql - distinct results : 0

Query subproperty.sparql - distinct results : 2

Query property\_domain.sparql - distinct results : 6

Query property\_range.sparql - distinct results : 13

Query indi\_range\_property.sparql - distinct results : 73

Query indi\_domain\_property.sparql - distinct results : 360

Query entity\_type.sparql - distinct results : 9342

**Total of unique results found 10005 on <https://id.nlm.nih.gov/mesh/sparql>**

### 2.2 Error Log

No errors encountered during the process

- Number of errors : 0

## **3 Process before indexation**

### **3.1 JSON results conversion after distinct operation**

All string results were converted into valid json results

## **4 Partition in separated queries**

The volume of 10005 results does not need query partition

## 5 Elastic Search Indexation

Index 'class' already exists and will be completed  
Storing 35 results in index 'class' took 0.915 secs

Index 'property' already exists and will be completed  
Storing 174 results in index 'property' took 0.458 secs

Index 'subproperty' already exists and will be completed  
Storing 2 results in index 'subproperty' took 0.251 secs

Index 'property\_domain' already exists and will be completed  
Storing 6 results in index 'property\_domain' took 0.029 secs

Index 'property\_range' already exists and will be completed  
Storing 13 results in index 'property\_range' took 0.132 secs

Index 'indi\_range\_property' already exists and will be completed  
Storing 73 results in index 'indi\_range\_property' took 0.072 secs

Index 'indi\_domain\_property' already exists and will be completed  
Storing 360 results in index 'indi\_domain\_property' took 0.047 secs

Index 'entity\_type' already exists and will be completed  
Storing 9342 results in index 'entity\_type' took 0.89 secs

## 6 Getting results and indexing times

Getting results for <https://id.nlm.nih.gov/mesh/sparql> took 2 min (153.432 secs)

Indexation for <https://id.nlm.nih.gov/mesh/sparql> took 0 min (13.306 secs)