

Usage of cube DEMO

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Contents

Introduction	1
Create DEMO sample table from CSV file	1
Execute the DEMO* SPARQL queries	2
This works do not change	15
Getting triples with information of object if literal	17

Introduction

This is not a good example yet - there is not real message nor flow in the document. TODO(mja): fix it.

Create DEMO sample table from CSV file

This script creates the result and codelist for a simple DEMO table.

```
library(rrdfancillary)
devtools::load_all(pkg="../..")
```

```
## Loading rrdfqbcrndex
```

```
library(rrdfqbcrnd0)
library(rrdfqb)

cubeVocabularyFn<- system.file("extdata/cube-vocabulary-rdf","cube.ttl", package="rrdfqb")

dataCubeFile<- system.file("extdata/sample-rdf", "DC-DEMO-sample.ttl", package="rrdfqbcrndex")

store <- new.rdf() # Initialize

cat("Loading cube specfication from ", cubeVocabularyFn, "\n")
```

```
## Loading cube specfication from /home/ma/R/x86_64-redhat-linux-gnu-library/3.2/rrdfqb/extdata/cube-v
```

```
tmp<- load.rdf(cubeVocabularyFn, format="TURTLE", appendTo= store)

cat("Loading cube from ", dataCubeFile, "\n")
```

```
## Loading cube from /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DC-DEMO-sample
```

```
tmp<- load.rdf(dataCubeFile, format="TURTLE", appendTo= store)

summarize.rdf(store)
```

```
## [1] "Number of triples: 3368"
```

Execute the DEMO* SPARQL queries

```
rqFiles<- system.file("extdata/sample-rdf", list.files(system.file("extdata/sample-rdf", package="rrdf

for (rqFile in rqFiles) {
  cat("File ", rqFile, "\n")
  rq<- paste0(readLines(rqFile),collapse="\n")
  res<- data.frame(sparql.rdf(store, rq),stringsAsFactors=FALSE)
  print(nrow(res))
  if (nrow(res)>0) {
    print(knitr::kable(res))
  }
}
```

```
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOattributes.rq
```

```
## [1] 6
```

```
##
```

```
## p
```

```
## -----
```

```
## crnd-attribute:cellpartno
```

```
## crnd-attribute:measurefmt
```

```
## crnd-attribute:colno
```

```
## crnd-attribute:denominator
```

```
## crnd-attribute:unit
```

```
## crnd-attribute:rowno
```

```
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOcodelist.rq
```

```
## [1] 301
```

```
##
```

```
##
```

## codeList	## codelevel	## codelist	## prefLabel
## -----	## -----	## -----	## -----
## code:ethnic	code:factor-quantity	code:factor	quantity
## code:ethnic	code:procedure-max	code:procedure	max
## code:ethnic	code:procedure-q3	code:procedure	q3
## code:ethnic	code:sex-F	code:sex	F
## code:ethnic	code:agegr1-_65	code:agegr1	<65
## code:ethnic	code:factor-proportion	code:factor	proportion
## code:ethnic	code:agegr1-_80	code:agegr1	>80
## code:ethnic	code:race-_ALL_	code:race	_ALL_
## code:ethnic	code:procedure-mean	code:procedure	mean
## code:ethnic	code:trt01a-_ALL_	code:trt01a	_ALL_
## code:ethnic	code:sex-M	code:sex	M

## code:ethnic	code:ethnic-HISPANIC_OR_LATINO	code:ethnic	HISPANIC OR LATINO
## code:ethnic	code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER	code:race	NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER
## code:ethnic	code:ethnic-NOT_HISPANIC_OR_LATINO	code:ethnic	NOT HISPANIC OR LATINO
## code:ethnic	code:procedure-median	code:procedure	median
## code:ethnic	code:ethnic-_NONMISS_	code:ethnic	_NONMISS_
## code:ethnic	code:procedure-q1	code:procedure	q1
## code:ethnic	code:trt01a-Xanomeline_High_Dose	code:trt01a	Xanomeline High Dose
## code:ethnic	code:agegr1-_ALL_	code:agegr1	_ALL_
## code:ethnic	code:sex-UN	code:sex	UN
## code:ethnic	code:sex-_ALL_	code:sex	_ALL_
## code:ethnic	code:race-ASIAN	code:race	ASIAN
## code:ethnic	code:race-WHITE	code:race	WHITE
## code:ethnic	code:trt01a-_NONMISS_	code:trt01a	_NONMISS_
## code:ethnic	code:sex-_NONMISS_	code:sex	_NONMISS_
## code:ethnic	code:factor-age	code:factor	age
## code:ethnic	code:ethnic-_ALL_	code:ethnic	_ALL_
## code:ethnic	code:procedure-n	code:procedure	n
## code:ethnic	code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE	code:race	AMERICAN INDIAN OR ALASKA NATIVE
## code:ethnic	code:trt01a-Placebo	code:trt01a	Placebo
## code:ethnic	code:factor-weighttbl	code:factor	weighttbl
## code:ethnic	code:trt01a-Xanomeline_Low_Dose	code:trt01a	Xanomeline Low Dose
## code:ethnic	code:factor-_ALL_	code:factor	_ALL_
## code:ethnic	code:procedure-percent	code:procedure	percent
## code:ethnic	code:agegr1-65-80	code:agegr1	65-80
## code:ethnic	code:procedure-min	code:procedure	min
## code:ethnic	code:race-_NONMISS_	code:race	_NONMISS_
## code:ethnic	code:agegr1-_NONMISS_	code:agegr1	_NONMISS_
## code:ethnic	code:race-BLACK_OR_AFRICAN_AMERICAN	code:race	BLACK OR AFRICAN AMERICAN
## code:ethnic	code:factor-_NONMISS_	code:factor	_NONMISS_
## code:ethnic	code:sex-U	code:sex	U
## code:ethnic	code:procedure-count	code:procedure	count
## code:ethnic	code:procedure-std	code:procedure	std
## code:agegr1	code:factor-quantity	code:factor	quantity
## code:agegr1	code:procedure-max	code:procedure	max
## code:agegr1	code:procedure-q3	code:procedure	q3
## code:agegr1	code:sex-F	code:sex	F
## code:agegr1	code:agegr1-_65	code:agegr1	<65
## code:agegr1	code:factor-proportion	code:factor	proportion
## code:agegr1	code:agegr1-_80	code:agegr1	>80
## code:agegr1	code:race-_ALL_	code:race	_ALL_
## code:agegr1	code:procedure-mean	code:procedure	mean
## code:agegr1	code:trt01a-_ALL_	code:trt01a	_ALL_
## code:agegr1	code:sex-M	code:sex	M
## code:agegr1	code:ethnic-HISPANIC_OR_LATINO	code:ethnic	HISPANIC OR LATINO
## code:agegr1	code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER	code:race	NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER
## code:agegr1	code:ethnic-NOT_HISPANIC_OR_LATINO	code:ethnic	NOT HISPANIC OR LATINO
## code:agegr1	code:procedure-median	code:procedure	median
## code:agegr1	code:ethnic-_NONMISS_	code:ethnic	_NONMISS_
## code:agegr1	code:procedure-q1	code:procedure	q1
## code:agegr1	code:trt01a-Xanomeline_High_Dose	code:trt01a	Xanomeline High Dose
## code:agegr1	code:agegr1-_ALL_	code:agegr1	_ALL_
## code:agegr1	code:sex-UN	code:sex	UN
## code:agegr1	code:sex-_ALL_	code:sex	_ALL_
## code:agegr1	code:race-ASIAN	code:race	ASIAN

## code:agegr1	code:race-WHITE	code:race	WHITE
## code:agegr1	code:trt01a-_NONMISS_	code:trt01a	_NONMISS_
## code:agegr1	code:sex-_NONMISS_	code:sex	_NONMISS_
## code:agegr1	code:factor-age	code:factor	age
## code:agegr1	code:ethnic-_ALL_	code:ethnic	_ALL_
## code:agegr1	code:procedure-n	code:procedure	n
## code:agegr1	code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE	code:race	AMERICAN IND
## code:agegr1	code:trt01a-Placebo	code:trt01a	Placebo
## code:agegr1	code:factor-weightbl	code:factor	weightbl
## code:agegr1	code:trt01a-Xanomeline_Low_Dose	code:trt01a	Xanomeline L
## code:agegr1	code:factor-_ALL_	code:factor	_ALL_
## code:agegr1	code:procedure-percent	code:procedure	percent
## code:agegr1	code:agegr1-65-80	code:agegr1	65-80
## code:agegr1	code:procedure-min	code:procedure	min
## code:agegr1	code:race-_NONMISS_	code:race	_NONMISS_
## code:agegr1	code:agegr1-_NONMISS_	code:agegr1	_NONMISS_
## code:agegr1	code:race-BLACK_OR_AFRICAN_AMERICAN	code:race	BLACK OR AFR
## code:agegr1	code:factor-_NONMISS_	code:factor	_NONMISS_
## code:agegr1	code:sex-U	code:sex	U
## code:agegr1	code:procedure-count	code:procedure	count
## code:agegr1	code:procedure-std	code:procedure	std
## code:procedure	code:factor-quantity	code:factor	quantity
## code:procedure	code:procedure-max	code:procedure	max
## code:procedure	code:procedure-q3	code:procedure	q3
## code:procedure	code:sex-F	code:sex	F
## code:procedure	code:agegr1-_65	code:agegr1	<65
## code:procedure	code:factor-proportion	code:factor	proportion
## code:procedure	code:agegr1-_80	code:agegr1	>80
## code:procedure	code:race-_ALL_	code:race	_ALL_
## code:procedure	code:procedure-mean	code:procedure	mean
## code:procedure	code:trt01a-_ALL_	code:trt01a	_ALL_
## code:procedure	code:sex-M	code:sex	M
## code:procedure	code:ethnic-HISPANIC_OR_LATINO	code:ethnic	HISPANIC OR I
## code:procedure	code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER	code:race	NATIVE HAWAI
## code:procedure	code:ethnic-NOT_HISPANIC_OR_LATINO	code:ethnic	NOT HISPANIC
## code:procedure	code:procedure-median	code:procedure	median
## code:procedure	code:ethnic-_NONMISS_	code:ethnic	_NONMISS_
## code:procedure	code:procedure-q1	code:procedure	q1
## code:procedure	code:trt01a-Xanomeline_High_Dose	code:trt01a	Xanomeline H
## code:procedure	code:agegr1-_ALL_	code:agegr1	_ALL_
## code:procedure	code:sex-UN	code:sex	UN
## code:procedure	code:sex-_ALL_	code:sex	_ALL_
## code:procedure	code:race-ASIAN	code:race	ASIAN
## code:procedure	code:race-WHITE	code:race	WHITE
## code:procedure	code:trt01a-_NONMISS_	code:trt01a	_NONMISS_
## code:procedure	code:sex-_NONMISS_	code:sex	_NONMISS_
## code:procedure	code:factor-age	code:factor	age
## code:procedure	code:ethnic-_ALL_	code:ethnic	_ALL_
## code:procedure	code:procedure-n	code:procedure	n
## code:procedure	code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE	code:race	AMERICAN IND
## code:procedure	code:trt01a-Placebo	code:trt01a	Placebo
## code:procedure	code:factor-weightbl	code:factor	weightbl
## code:procedure	code:trt01a-Xanomeline_Low_Dose	code:trt01a	Xanomeline L
## code:procedure	code:factor-_ALL_	code:factor	_ALL_

## code:procedure	code:procedure-percent	code:procedure	percent
## code:procedure	code:agegr1-65-80	code:agegr1	65-80
## code:procedure	code:procedure-min	code:procedure	min
## code:procedure	code:race-_NONMISS_	code:race	_NONMISS_
## code:procedure	code:agegr1-_NONMISS_	code:agegr1	_NONMISS_
## code:procedure	code:race-BLACK_OR_AFRICAN_AMERICAN	code:race	BLACK OR AFR.
## code:procedure	code:factor-_NONMISS_	code:factor	_NONMISS_
## code:procedure	code:sex-U	code:sex	U
## code:procedure	code:procedure-count	code:procedure	count
## code:procedure	code:procedure-std	code:procedure	std
## code:factor	code:factor-quantity	code:factor	quantity
## code:factor	code:procedure-max	code:procedure	max
## code:factor	code:procedure-q3	code:procedure	q3
## code:factor	code:sex-F	code:sex	F
## code:factor	code:agegr1-_65	code:agegr1	<65
## code:factor	code:factor-proportion	code:factor	proportion
## code:factor	code:agegr1-_80	code:agegr1	>80
## code:factor	code:race-_ALL_	code:race	_ALL_
## code:factor	code:procedure-mean	code:procedure	mean
## code:factor	code:trt01a-_ALL_	code:trt01a	_ALL_
## code:factor	code:sex-M	code:sex	M
## code:factor	code:ethnic-HISPANIC_OR_LATINO	code:ethnic	HISPANIC OR I
## code:factor	code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER	code:race	NATIVE HAWAI
## code:factor	code:ethnic-NOT_HISPANIC_OR_LATINO	code:ethnic	NOT HISPANIC
## code:factor	code:procedure-median	code:procedure	median
## code:factor	code:ethnic-_NONMISS_	code:ethnic	_NONMISS_
## code:factor	code:procedure-q1	code:procedure	q1
## code:factor	code:trt01a-Xanomeline_High_Dose	code:trt01a	Xanomeline H
## code:factor	code:agegr1-_ALL_	code:agegr1	_ALL_
## code:factor	code:sex-UN	code:sex	UN
## code:factor	code:sex-_ALL_	code:sex	_ALL_
## code:factor	code:race-ASIAN	code:race	ASIAN
## code:factor	code:race-WHITE	code:race	WHITE
## code:factor	code:trt01a-_NONMISS_	code:trt01a	_NONMISS_
## code:factor	code:sex-_NONMISS_	code:sex	_NONMISS_
## code:factor	code:factor-age	code:factor	age
## code:factor	code:ethnic-_ALL_	code:ethnic	_ALL_
## code:factor	code:procedure-n	code:procedure	n
## code:factor	code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE	code:race	AMERICAN IND
## code:factor	code:trt01a-Placebo	code:trt01a	Placebo
## code:factor	code:factor-weightbl	code:factor	weightbl
## code:factor	code:trt01a-Xanomeline_Low_Dose	code:trt01a	Xanomeline L
## code:factor	code:factor-_ALL_	code:factor	_ALL_
## code:factor	code:procedure-percent	code:procedure	percent
## code:factor	code:agegr1-65-80	code:agegr1	65-80
## code:factor	code:procedure-min	code:procedure	min
## code:factor	code:race-_NONMISS_	code:race	_NONMISS_
## code:factor	code:agegr1-_NONMISS_	code:agegr1	_NONMISS_
## code:factor	code:race-BLACK_OR_AFRICAN_AMERICAN	code:race	BLACK OR AFR.
## code:factor	code:factor-_NONMISS_	code:factor	_NONMISS_
## code:factor	code:sex-U	code:sex	U
## code:factor	code:procedure-count	code:procedure	count
## code:factor	code:procedure-std	code:procedure	std
## code:trt01a	code:factor-quantity	code:factor	quantity

## code:trt01a	code:procedure-max	code:procedure	max
## code:trt01a	code:procedure-q3	code:procedure	q3
## code:trt01a	code:sex-F	code:sex	F
## code:trt01a	code:agegr1-_65	code:agegr1	<65
## code:trt01a	code:factor-proportion	code:factor	proportion
## code:trt01a	code:agegr1-_80	code:agegr1	>80
## code:trt01a	code:race-_ALL_	code:race	_ALL_
## code:trt01a	code:procedure-mean	code:procedure	mean
## code:trt01a	code:trt01a-_ALL_	code:trt01a	_ALL_
## code:trt01a	code:sex-M	code:sex	M
## code:trt01a	code:ethnic-HISPANIC_OR_LATINO	code:ethnic	HISPANIC OR I
## code:trt01a	code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER	code:race	NATIVE HAWAI
## code:trt01a	code:ethnic-NOT_HISPANIC_OR_LATINO	code:ethnic	NOT HISPANIC
## code:trt01a	code:procedure-median	code:procedure	median
## code:trt01a	code:ethnic-_NONMISS_	code:ethnic	_NONMISS_
## code:trt01a	code:procedure-q1	code:procedure	q1
## code:trt01a	code:trt01a-Xanomeline_High_Dose	code:trt01a	Xanomeline H
## code:trt01a	code:agegr1-_ALL_	code:agegr1	_ALL_
## code:trt01a	code:sex-UN	code:sex	UN
## code:trt01a	code:sex-_ALL_	code:sex	_ALL_
## code:trt01a	code:race-ASIAN	code:race	ASIAN
## code:trt01a	code:race-WHITE	code:race	WHITE
## code:trt01a	code:trt01a-_NONMISS_	code:trt01a	_NONMISS_
## code:trt01a	code:sex-_NONMISS_	code:sex	_NONMISS_
## code:trt01a	code:factor-age	code:factor	age
## code:trt01a	code:ethnic-_ALL_	code:ethnic	_ALL_
## code:trt01a	code:procedure-n	code:procedure	n
## code:trt01a	code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE	code:race	AMERICAN IND
## code:trt01a	code:trt01a-Placebo	code:trt01a	Placebo
## code:trt01a	code:factor-weighttbl	code:factor	weighttbl
## code:trt01a	code:trt01a-Xanomeline_Low_Dose	code:trt01a	Xanomeline L
## code:trt01a	code:factor-_ALL_	code:factor	_ALL_
## code:trt01a	code:procedure-percent	code:procedure	percent
## code:trt01a	code:agegr1-65-80	code:agegr1	65-80
## code:trt01a	code:procedure-min	code:procedure	min
## code:trt01a	code:race-_NONMISS_	code:race	_NONMISS_
## code:trt01a	code:agegr1-_NONMISS_	code:agegr1	_NONMISS_
## code:trt01a	code:race-BLACK_OR_AFRICAN_AMERICAN	code:race	BLACK OR AFR
## code:trt01a	code:factor-_NONMISS_	code:factor	_NONMISS_
## code:trt01a	code:sex-U	code:sex	U
## code:trt01a	code:procedure-count	code:procedure	count
## code:trt01a	code:procedure-std	code:procedure	std
## code:sex	code:factor-quantity	code:factor	quantity
## code:sex	code:procedure-max	code:procedure	max
## code:sex	code:procedure-q3	code:procedure	q3
## code:sex	code:sex-F	code:sex	F
## code:sex	code:agegr1-_65	code:agegr1	<65
## code:sex	code:factor-proportion	code:factor	proportion
## code:sex	code:agegr1-_80	code:agegr1	>80
## code:sex	code:race-_ALL_	code:race	_ALL_
## code:sex	code:procedure-mean	code:procedure	mean
## code:sex	code:trt01a-_ALL_	code:trt01a	_ALL_
## code:sex	code:sex-M	code:sex	M
## code:sex	code:ethnic-HISPANIC_OR_LATINO	code:ethnic	HISPANIC OR I

## code:sex	code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER	code:race	NATIVE HAWAIIAN
## code:sex	code:ethnic-NOT_HISPANIC_OR_LATINO	code:ethnic	NOT HISPANIC
## code:sex	code:procedure-median	code:procedure	median
## code:sex	code:ethnic-_NONMISS_	code:ethnic	_NONMISS_
## code:sex	code:procedure-q1	code:procedure	q1
## code:sex	code:trt01a-Xanomeline_High_Dose	code:trt01a	Xanomeline H
## code:sex	code:agegr1-_ALL_	code:agegr1	_ALL_
## code:sex	code:sex-UN	code:sex	UN
## code:sex	code:sex-_ALL_	code:sex	_ALL_
## code:sex	code:race-ASIAN	code:race	ASIAN
## code:sex	code:race-WHITE	code:race	WHITE
## code:sex	code:trt01a-_NONMISS_	code:trt01a	_NONMISS_
## code:sex	code:sex-_NONMISS_	code:sex	_NONMISS_
## code:sex	code:factor-age	code:factor	age
## code:sex	code:ethnic-_ALL_	code:ethnic	_ALL_
## code:sex	code:procedure-n	code:procedure	n
## code:sex	code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE	code:race	AMERICAN IND
## code:sex	code:trt01a-Placebo	code:trt01a	Placebo
## code:sex	code:factor-weighttbl	code:factor	weighttbl
## code:sex	code:trt01a-Xanomeline_Low_Dose	code:trt01a	Xanomeline L
## code:sex	code:factor-_ALL_	code:factor	_ALL_
## code:sex	code:procedure-percent	code:procedure	percent
## code:sex	code:agegr1-65-80	code:agegr1	65-80
## code:sex	code:procedure-min	code:procedure	min
## code:sex	code:race-_NONMISS_	code:race	_NONMISS_
## code:sex	code:agegr1-_NONMISS_	code:agegr1	_NONMISS_
## code:sex	code:race-BLACK_OR_AFRICAN_AMERICAN	code:race	BLACK OR AFR
## code:sex	code:factor-_NONMISS_	code:factor	_NONMISS_
## code:sex	code:sex-U	code:sex	U
## code:sex	code:procedure-count	code:procedure	count
## code:sex	code:procedure-std	code:procedure	std
## code:race	code:factor-quantity	code:factor	quantity
## code:race	code:procedure-max	code:procedure	max
## code:race	code:procedure-q3	code:procedure	q3
## code:race	code:sex-F	code:sex	F
## code:race	code:agegr1-_65	code:agegr1	<65
## code:race	code:factor-proportion	code:factor	proportion
## code:race	code:agegr1-_80	code:agegr1	>80
## code:race	code:race-_ALL_	code:race	_ALL_
## code:race	code:procedure-mean	code:procedure	mean
## code:race	code:trt01a-_ALL_	code:trt01a	_ALL_
## code:race	code:sex-M	code:sex	M
## code:race	code:ethnic-HISPANIC_OR_LATINO	code:ethnic	HISPANIC OR I
## code:race	code:race-NATIVE_HAWAIIAN_OR_OTHER_PACIFIC_ISLANDER	code:race	NATIVE HAWAIIAN
## code:race	code:ethnic-NOT_HISPANIC_OR_LATINO	code:ethnic	NOT HISPANIC
## code:race	code:procedure-median	code:procedure	median
## code:race	code:ethnic-_NONMISS_	code:ethnic	_NONMISS_
## code:race	code:procedure-q1	code:procedure	q1
## code:race	code:trt01a-Xanomeline_High_Dose	code:trt01a	Xanomeline H
## code:race	code:agegr1-_ALL_	code:agegr1	_ALL_
## code:race	code:sex-UN	code:sex	UN
## code:race	code:sex-_ALL_	code:sex	_ALL_
## code:race	code:race-ASIAN	code:race	ASIAN
## code:race	code:race-WHITE	code:race	WHITE

```

## code:race          code:trt01a-_NONMISS_          code:trt01a          _NONMISS_
## code:race          code:sex-_NONMISS_             code:sex             _NONMISS_
## code:race          code:factor-age                 code:factor          age
## code:race          code:ethnic-_ALL_               code:ethnic           _ALL_
## code:race          code:procedure-n                 code:procedure        n
## code:race          code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE code:race             AMERICAN IND
## code:race          code:trt01a-Placebo             code:trt01a          Placebo
## code:race          code:factor-weightbl            code:factor           weightbl
## code:race          code:trt01a-Xanomeline_Low_Dose  code:trt01a          Xanomeline L
## code:race          code:factor-_ALL_               code:factor           _ALL_
## code:race          code:procedure-percent           code:procedure        percent
## code:race          code:agegr1-65-80               code:agegr1           65-80
## code:race          code:procedure-min               code:procedure        min
## code:race          code:race-_NONMISS_             code:race             _NONMISS_
## code:race          code:agegr1-_NONMISS_           code:agegr1           _NONMISS_
## code:race          code:race-BLACK_OR_AFRICAN_AMERICAN code:race             BLACK OR AFR
## code:race          code:factor-_NONMISS_           code:factor           _NONMISS_
## code:race          code:sex-U                     code:sex              U
## code:race          code:procedure-count            code:procedure        count
## code:race          code:procedure-std              code:procedure        std
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOfactor-codelist.rq
## [1] 7
##
##
## p
## -----
## crnd-dimension:ethnic
## crnd-dimension:race
## crnd-dimension:procedure
## crnd-dimension:agegr1
## crnd-dimension:factor
## crnd-dimension:trt01a
## crnd-dimension:sex
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOfactor-codelist.rq
## [1] 53
##
##
## s          p          o
## -----
## code:factor-weightbl skos:topConceptOf          code:factor
## code:factor-weightbl skos:prefLabel            weightbl
## code:factor-weightbl skos:inScheme                code:factor
## code:factor-weightbl rrdfqbcrnd0:R-selectionvalue weightbl
## code:factor-weightbl rrdfqbcrnd0:R-selectionoperator ==
## code:factor-weightbl rrdfqbcrnd0:DataSetRefD2RQ   rrdfqbcrnd0:ADSL_WEIGHTBL
## code:factor-weightbl rdfs:comment                 Coded values from data source. No reconcili
## code:factor-weightbl rdf:type                     skos:Concept
## code:factor-weightbl rdf:type                     code:Factor
## code:factor-age      skos:topConceptOf          code:factor
## code:factor-age      skos:prefLabel            age
## code:factor-age      skos:inScheme                code:factor
## code:factor-age      rrdfqbcrnd0:R-selectionvalue age
## code:factor-age      rrdfqbcrnd0:R-selectionoperator ==
## code:factor-age      rrdfqbcrnd0:DataSetRefD2RQ rrdfqbcrnd0:ADSL_AGE

```



```

## code:factor-age      rdfs:comment      Coded values from data source. No reconcili
## code:factor-age      rdf:type          skos:Concept
## code:factor-age      rdf:type          code:Factor
## code:factor-_ALL_    skos:topConceptOf  code:factor
## code:factor-_ALL_    skos:prefLabel    _ALL_
## code:factor-_ALL_    skos:inScheme     code:factor
## code:factor-_ALL_    rdfs:comment      NON-CDISC: Represents all codelist categor
## code:factor-_ALL_    rdf:type          skos:Concept
## code:factor-_ALL_    rdf:type          code:Factor
## code:factor-quantity skos:topConceptOf  code:factor
## code:factor-quantity skos:prefLabel    quantity
## code:factor-quantity skos:inScheme     code:factor
## code:factor-quantity rrdfqbcrnd0:R-selectionvalue  quantity
## code:factor-quantity rrdfqbcrnd0:R-selectionoperator ==
## code:factor-quantity rdfs:comment      Coded values from data source. No reconcili
## code:factor-quantity rdf:type          skos:Concept
## code:factor-quantity rdf:type          code:Factor
## code:factor-_NONMISS_ skos:topConceptOf  code:factor
## code:factor-_NONMISS_ skos:prefLabel    _NONMISS_
## code:factor-_NONMISS_ skos:inScheme     code:factor
## code:factor-_NONMISS_ rrdfqbcrnd0:R-selectionfunction  is.na
## code:factor-_NONMISS_ rdfs:comment      NON-CDISC: Represents the non-missing cod
## code:factor-_NONMISS_ rdf:type          skos:Concept
## code:factor-_NONMISS_ rdf:type          code:Factor
## code:factor-proportion skos:topConceptOf  code:factor
## code:factor-proportion skos:prefLabel    proportion
## code:factor-proportion skos:inScheme     code:factor
## code:factor-proportion rrdfqbcrnd0:R-selectionvalue  proportion
## code:factor-proportion rrdfqbcrnd0:R-selectionoperator ==
## code:factor-proportion rdfs:comment      Coded values from data source. No reconcili
## code:factor-proportion rdf:type          skos:Concept
## code:factor-proportion rdf:type          code:Factor
## code:factor-proportion rdf:type          rdfs:Resource
## code:factor-_NONMISS_ rdf:type          rdfs:Resource
## code:factor-quantity  rdf:type          rdfs:Resource
## code:factor-_ALL_     rdf:type          rdfs:Resource
## code:factor-age       rdf:type          rdfs:Resource
## code:factor-weightbl  rdf:type          rdfs:Resource
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOfactor.rq
## [1] 6
##
##
## factor      prefLabel  DataSetRefD2RQ      Rselectionvalue
## -----
## code:factor-_ALL_    _ALL_      NA      NA
## code:factor-proportion proportion  NA      proportion
## code:factor-weightbl weightbl    rrdfqbcrnd0:ADSL_WEIGHTBL  weightbl
## code:factor-_NONMISS_ _NONMISS_  NA      NA
## code:factor-quantity quantity    NA      quantity
## code:factor-age      age        rrdfqbcrnd0:ADSL_AGE      age
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOobservations-R-data-par
## [1] 2
##
##

```

```

## obs          D2RQPropertyBridge          Rselectionvalue
## -----
## ds:obs007    http://www.example.org/datasets/vocab/ADSL_SEX      F
## ds:obs007    http://www.example.org/datasets/vocab/ADSL_TRT01A    Placebo
## File  /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOobservations-R-data.rq
## [1] 0
## File  /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOobservations-R-selection
## [1] 3
##
##
## obs          rrdfqbcrnd0Rcolumnname      Rselectionoperator      Rselectionvalue
## -----
## ds:obs027    trt01a                      ==                      Xanomeline High Dose
## ds:obs056    trt01a                      ==                      Xanomeline Low Dose
## ds:obs056    agegr1                      ==                      65-80
## File  /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOobservations.rq
## [1] 132
##
##
## s            ethnic                      race                      proced
## -----
## ds:obs001    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs002    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs003    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs004    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs005    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs006    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs007    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs008    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs009    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs010    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs011    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs012    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs013    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs014    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs015    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs016    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs017    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs018    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs019    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs020    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs021    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs022    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs023    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs024    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs025    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs026    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs027    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs028    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs029    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs030    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs031    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs032    code:ethnic-_ALL_          code:race-_ALL_          code:p
## ds:obs033    code:ethnic-_ALL_          code:race-_ALL_          code:p

```

[illegible]

```

## ds:obs088 code:ethnic-_ALL_ code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE code:p
## ds:obs089 code:ethnic-_ALL_ code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE code:p
## ds:obs090 code:ethnic-_ALL_ code:race-AMERICAN_INDIAN_OR_ALASKA_NATIVE code:p
## ds:obs091 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs092 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs093 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs094 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs095 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs096 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs097 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs098 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs099 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs100 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs101 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs102 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs103 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs104 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs105 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs106 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs107 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs108 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs109 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs110 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs111 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs112 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs113 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs114 code:ethnic-_ALL_ code:race-_ALL_ code:p
## ds:obs115 code:ethnic-_NONMISS_ code:race-_ALL_ code:p
## ds:obs116 code:ethnic-_NONMISS_ code:race-_ALL_ code:p
## ds:obs117 code:ethnic-_NONMISS_ code:race-_ALL_ code:p
## ds:obs118 code:ethnic-_NONMISS_ code:race-_ALL_ code:p
## ds:obs119 code:ethnic-_NONMISS_ code:race-_ALL_ code:p
## ds:obs120 code:ethnic-_NONMISS_ code:race-_ALL_ code:p
## ds:obs121 code:ethnic-NOT_HISPANIC_OR_LATINO code:race-_ALL_ code:p
## ds:obs122 code:ethnic-NOT_HISPANIC_OR_LATINO code:race-_ALL_ code:p
## ds:obs123 code:ethnic-NOT_HISPANIC_OR_LATINO code:race-_ALL_ code:p
## ds:obs124 code:ethnic-NOT_HISPANIC_OR_LATINO code:race-_ALL_ code:p
## ds:obs125 code:ethnic-NOT_HISPANIC_OR_LATINO code:race-_ALL_ code:p
## ds:obs126 code:ethnic-NOT_HISPANIC_OR_LATINO code:race-_ALL_ code:p
## ds:obs127 code:ethnic-HISPANIC_OR_LATINO code:race-_ALL_ code:p
## ds:obs128 code:ethnic-HISPANIC_OR_LATINO code:race-_ALL_ code:p
## ds:obs129 code:ethnic-HISPANIC_OR_LATINO code:race-_ALL_ code:p
## ds:obs130 code:ethnic-HISPANIC_OR_LATINO code:race-_ALL_ code:p
## ds:obs131 code:ethnic-HISPANIC_OR_LATINO code:race-_ALL_ code:p
## ds:obs132 code:ethnic-HISPANIC_OR_LATINO code:race-_ALL_ code:p
## File /home/ma/projects/rrdfqbcrrnd0/rrdfqbcrrndex/inst/extdata/sample-rdf/DEMOprocedure-codelist.rq
## [1] 100
##
##
## s p o
## -----
## code:procedure-min skos:topConceptOf code:procedure
## code:procedure-min skos:prefLabel min
## code:procedure-min skos:inScheme code:procedure

```

## code:procedure-min	rrdfqbcrnd0:RdescStatDefFun	function (x) { min(x, na.rm = TRUE) }
## code:procedure-min	rrdfqbcrnd0:R-selectionvalue	min
## code:procedure-min	rrdfqbcrnd0:R-selectionoperator	==
## code:procedure-min	rdfs:comment	Descriptive statistics min
## code:procedure-min	rdf:type	skos:Concept
## code:procedure-min	rdf:type	code:Procedure
## code:procedure-std	skos:topConceptOf	code:procedure
## code:procedure-std	skos:prefLabel	std
## code:procedure-std	skos:inScheme	code:procedure
## code:procedure-std	rrdfqbcrnd0:RdescStatDefFun	function (x) { sd(x, na.rm = TRUE) }
## code:procedure-std	rrdfqbcrnd0:R-selectionvalue	std
## code:procedure-std	rrdfqbcrnd0:R-selectionoperator	==
## code:procedure-std	rdfs:comment	Descriptive statistics std
## code:procedure-std	rdf:type	skos:Concept
## code:procedure-std	rdf:type	code:Procedure
## code:procedure-q3	skos:topConceptOf	code:procedure
## code:procedure-q3	skos:prefLabel	q3
## code:procedure-q3	skos:inScheme	code:procedure
## code:procedure-q3	rrdfqbcrnd0:RdescStatDefFun	function (x) { quantile(x, probs = c
## code:procedure-q3	rrdfqbcrnd0:R-selectionvalue	q3
## code:procedure-q3	rrdfqbcrnd0:R-selectionoperator	==
## code:procedure-q3	rdfs:comment	Descriptive statistics q3
## code:procedure-q3	rdf:type	skos:Concept
## code:procedure-q3	rdf:type	code:Procedure
## code:procedure-median	skos:topConceptOf	code:procedure
## code:procedure-median	skos:prefLabel	median
## code:procedure-median	skos:inScheme	code:procedure
## code:procedure-median	rrdfqbcrnd0:RdescStatDefFun	function (x) { median(x, na.rm = TRUE) }
## code:procedure-median	rrdfqbcrnd0:R-selectionvalue	median
## code:procedure-median	rrdfqbcrnd0:R-selectionoperator	==
## code:procedure-median	rdfs:comment	Descriptive statistics median
## code:procedure-median	rdf:type	skos:Concept
## code:procedure-median	rdf:type	code:Procedure
## code:procedure-count	skos:topConceptOf	code:procedure
## code:procedure-count	skos:prefLabel	count
## code:procedure-count	skos:inScheme	code:procedure
## code:procedure-count	rrdfqbcrnd0:RdescStatDefFun	function (x) { length(x) }
## code:procedure-count	rrdfqbcrnd0:R-selectionvalue	count
## code:procedure-count	rrdfqbcrnd0:R-selectionoperator	==
## code:procedure-count	rdfs:comment	Descriptive statistics count
## code:procedure-count	rdf:type	skos:Concept
## code:procedure-count	rdf:type	code:Procedure
## code:procedure-max	skos:topConceptOf	code:procedure
## code:procedure-max	skos:prefLabel	max
## code:procedure-max	skos:inScheme	code:procedure
## code:procedure-max	rrdfqbcrnd0:RdescStatDefFun	function (x) { max(x, na.rm = TRUE) }
## code:procedure-max	rrdfqbcrnd0:R-selectionvalue	max
## code:procedure-max	rrdfqbcrnd0:R-selectionoperator	==
## code:procedure-max	rdfs:comment	Descriptive statistics max
## code:procedure-max	rdf:type	skos:Concept
## code:procedure-max	rdf:type	code:Procedure
## code:procedure-mean	skos:topConceptOf	code:procedure
## code:procedure-mean	skos:prefLabel	mean
## code:procedure-mean	skos:inScheme	code:procedure

```

## code:procedure-mean      rrdfqbcrnd0:RdescStatDefFun      function (x) {      mean(x, na.rm = TRUE)
## code:procedure-mean      rrdfqbcrnd0:R-selectionvalue      mean
## code:procedure-mean      rrdfqbcrnd0:R-selectionoperator      ==
## code:procedure-mean      rdfs:comment      Descriptive statistics mean
## code:procedure-mean      rdf:type      skos:Concept
## code:procedure-mean      rdf:type      code:Procedure
## code:procedure-q1      skos:topConceptOf      code:procedure
## code:procedure-q1      skos:prefLabel      q1
## code:procedure-q1      skos:inScheme      code:procedure
## code:procedure-q1      rrdfqbcrnd0:RdescStatDefFun      function (x) {      quantile(x, probs = c
## code:procedure-q1      rrdfqbcrnd0:R-selectionvalue      q1
## code:procedure-q1      rrdfqbcrnd0:R-selectionoperator      ==
## code:procedure-q1      rdfs:comment      Descriptive statistics q1
## code:procedure-q1      rdf:type      skos:Concept
## code:procedure-q1      rdf:type      code:Procedure
## code:procedure-q1      skos:topConceptOf      code:procedure
## code:procedure-n      skos:prefLabel      n
## code:procedure-n      skos:inScheme      code:procedure
## code:procedure-n      rrdfqbcrnd0:RdescStatDefFun      function (x) {      length(x[!is.na(x)])
## code:procedure-n      rrdfqbcrnd0:R-selectionvalue      n
## code:procedure-n      rrdfqbcrnd0:R-selectionoperator      ==
## code:procedure-n      rdfs:comment      Descriptive statistics n
## code:procedure-n      rdf:type      skos:Concept
## code:procedure-n      rdf:type      code:Procedure
## code:procedure-n      skos:topConceptOf      code:procedure
## code:procedure-percent      skos:prefLabel      percent
## code:procedure-percent      skos:inScheme      code:procedure
## code:procedure-percent      rrdfqbcrnd0:RdescStatDefFun      function (x) {      -1 }
## code:procedure-percent      rrdfqbcrnd0:R-selectionvalue      percent
## code:procedure-percent      rrdfqbcrnd0:R-selectionoperator      ==
## code:procedure-percent      rdfs:comment      Descriptive statistics percent
## code:procedure-percent      rdf:type      skos:Concept
## code:procedure-percent      rdf:type      code:Procedure
## code:procedure-q3      rdf:type      rdfs:Resource
## code:procedure-mean      rdf:type      rdfs:Resource
## code:procedure-q1      rdf:type      rdfs:Resource
## code:procedure-std      rdf:type      rdfs:Resource
## code:procedure-count      rdf:type      rdfs:Resource
## code:procedure-median      rdf:type      rdfs:Resource
## code:procedure-percent      rdf:type      rdfs:Resource
## code:procedure-min      rdf:type      rdfs:Resource
## code:procedure-max      rdf:type      rdfs:Resource
## code:procedure-n      rdf:type      rdfs:Resource
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOprocedure-median.rq
## [1] 10
##
##
## s      p      o
## -----
## code:procedure-median      skos:topConceptOf      code:procedure
## code:procedure-median      skos:prefLabel      median
## code:procedure-median      skos:inScheme      code:procedure
## code:procedure-median      rrdfqbcrnd0:RdescStatDefFun      function (x) {      median(x, na.rm = TRUE)
## code:procedure-median      rrdfqbcrnd0:R-selectionvalue      median

```

```
## code:procedure-median   rrdfqbcrnd0:R-selectionoperator   ==
## code:procedure-median   rdfs:comment                     Descriptive statistics median
## code:procedure-median   rdf:type                         skos:Concept
## code:procedure-median   rdf:type                         code:Procedure
## code:procedure-median   rdf:type                         rdfs:Resource
## File /home/ma/projects/rrdfqbcrnd0/rrdfqbcrndex/inst/extdata/sample-rdf/DEMOprocedure.rq
## [1] 10
##
##
## procedure               prefLabel   functiondef
## -----
## code:procedure-max      max         function (x) {   max(x, na.rm = TRUE) }
## code:procedure-std      std         function (x) {   sd(x, na.rm = TRUE) }
## code:procedure-mean     mean        function (x) {   mean(x, na.rm = TRUE) }
## code:procedure-min      min         function (x) {   min(x, na.rm = TRUE) }
## code:procedure-percent  percent     function (x) {   -1 }
## code:procedure-count    count        function (x) {   length(x) }
## code:procedure-q3       q3          function (x) {   quantile(x, probs = c(0.75), na.rm = TRUE) }
## code:procedure-n        n           function (x) {   length(x[!is.na(x)]) }
## code:procedure-median   median       function (x) {   median(x, na.rm = TRUE) }
## code:procedure-q1       q1          function (x) {   quantile(x, probs = c(0.25), na.rm = TRUE) }
```

This works do not change

```
dsdName<- GetDsdNameFromCube( store )
domainName<- GetDomainNameFromCube( store )
cat("dsdName ", dsdName, ", domainName ", domainName, "\n" )
```

```
## dsdName   dsd-DEMO , domainName   DEMO
```

```
forsparqlprefix<- GetForSparqlPrefix( domainName )
cat(forsparqlprefix,"\n")
```

```
## prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
## prefix skos: <http://www.w3.org/2004/02/skos/core#>
## prefix prov: <http://www.w3.org/ns/prov#>
## prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>
## prefix dcat: <http://www.w3.org/ns/dcat#>
## prefix owl: <http://www.w3.org/2002/07/owl#>
## prefix xsd: <http://www.w3.org/2001/XMLSchema#>
## prefix pav: <http://purl.org/pav>
## prefix dc: <http://purl.org/dc/elements/1.1/>
## prefix dct: <http://purl.org/dc/terms/>
## prefix mms: <http://rdf.cd-disc.org/mms#>
## prefix cts: <http://rdf.cd-disc.org/ct/schema#>
## prefix cdiscs: <http://rdf.cd-disc.org/std/schema#>
## prefix cdash-1-1: <http://rdf.cd-disc.org/std/cdash-1-1#>
## prefix cdashct: <http://rdf.cd-disc.org/cdash-terminology#>
## prefix sdtmct: <http://rdf.cd-disc.org/sdtm-terminology#>
## prefix sdtm-1-2: <http://rdf.cd-disc.org/std/sdtm-1-2#>
## prefix sdtm-1-3: <http://rdf.cd-disc.org/std/sdtm-1-3#>
```

```
## prefix sdtms-1-3: <http://rdf.cdisc.org/sdtm-1-3/schema#>
## prefix sdtmig-3-1-2: <http://rdf.cdisc.org/std/sdtmig-3-1-2#>
## prefix sdtmig-3-1-3: <http://rdf.cdisc.org/std/sdtmig-3-1-3#>
## prefix sendct: <http://rdf.cdisc.org/send-terminology#>
## prefix sendig-3-0: <http://rdf.cdisc.org/std/sendig-3-0#>
## prefix adamct: <http://rdf.cdisc.org/adam-terminology#>
## prefix adam-2-1: <http://rdf.cdisc.org/std/adam-2-1#>
## prefix adamig-1-0: <http://rdf.cdisc.org/std/adamig-1-0#>
## prefix adamvr-1-2: <http://rdf.cdisc.org/std/adamvr-1-2#>
## prefix qb: <http://purl.org/linked-data/cube#>
## prefix rrdqbcrnd0: <http://www.example.org/rrdfqbcrnd0/>
## prefix code: <http://www.example.org/dc/code/>
## prefix dccc: <http://www.example.org/dc/demo/dccc/>
## prefix ds: <http://www.example.org/dc/demo/ds/>
## prefix crnd-dimension: <http://www.example.org/dc/dimension#>
## prefix crnd-attribute: <http://www.example.org/dc/attribute#>
## prefix crnd-measure: <http://www.example.org/dc/measure#>
##
```

```
rq<- paste( forsparqlprefix,
,
select *
where {
?s a qb:Observation ;
?p ?o ;
.
[] qb:dimension ?p .
values (?s) {
(ds:obs114)
}
}
# limit 30
,
"\n"
)

cube.observations<- sparql.rdf(store, rq)
knitr::kable(cube.observations)
```

s	p	o
ds:obs114	crnd-dimension:factor	code:factor-weightbl
ds:obs114	crnd-dimension:trt01a	code:trt01a-Xanomeline_High_Dose
ds:obs114	crnd-dimension:sex	code:sex- <i>ALL</i>
ds:obs114	crnd-dimension:ethnic	code:ethnic- <i>ALL</i>
ds:obs114	crnd-dimension:procedure	code:procedure-min
ds:obs114	crnd-dimension:race	code:race- <i>ALL</i>
ds:obs114	crnd-dimension:agegr1	code:agegr1- <i>ALL</i>

Getting triples with information of object if literal

```
cons.rq<- paste( forsparqlprefix,
,
construct { ?s ?p ?o }
where {
?s ?p ?o .
BIND( datatype(?o) as ?datatype )
BIND( isLiteral(?o) as ?isLiteral )
BIND( lang(?o) as ?lang )
values (?s) {
(ds:obs114)
}
}
,
"\n"
)

save.rdf(construct.rdf( store, cons.rq) , file.path(tempdir(), "rapperin.ttl"), "TURTLE")
```

```
## [1] "/tmp/RtmpfV24Ze/rapperin.ttl"
```

To see dot code generated by rapper:

```
rapper -i turtle -o dot /tmp/Rtmpcccgdg/rapperin.ttl
```

To display the dot code

```
rapper -i turtle -o dot /tmp/Rtmpcccgdg/rapperin.ttl | dot -x -Tpdf -ograph.pdf
```

See also (<http://www.bioconductor.org/packages/release/bioc/vignettes/Rgraphviz/inst/doc/Rgraphviz.pdf>) for Rgraphviz package - may be used to display graphs.

ToDo(MJA): move this to another package - is more an example of R code for making Rgraphviz statement

```
rq<- paste( forsparqlprefix,
,
select *
where {
?s ?p ?o .
BIND( datatype(?o) as ?datatype )
BIND( isLiteral(?o) as ?isLiteral )
BIND( lang(?o) as ?lang )
values (?s) {
(ds:obs114)
}
}
,
"\n"
)
```

```

res<- sparql.rdf(store, rq)
knitr::kable(res)

dimnames(res)

allIRI<- c( res[,1],res[,2])
uallIRI<- unique(allIRI)
L<- list()
for (i in 1:length(uallIRI) ) {
L[[ uallIRI[i] ]] <- paste( "L", i, sep="" )
}

rowcols<- cbind( as.matrix(apply(res[,1:2],c(1,2),function(x) as.character(L[[x]] ))),as.matrix(res[,3])
cat(paste(rowcols, sep=" ", "\n")

```

Check the statistics

ToDo(MJA): move this to another package - maybe the check package

```

stmtSQL<- GetSQLFromCube(store)
cat(stmtSQL$summStatSQL)

```