# GMQL: GenoMetrics Query Language

# Simone pallotta 2017-08-20

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### 1 Introduction

Improvement of sequencing technologies and data processing pipelines is rapidly providing sequencing data, with associated high-level features, of many individual genomes in multiple biological and clinical conditions. For this purpose GMQL has been proposed a high-level, declarative GenoMetric Query Language (GMQL) and a toolkit for its use.

#### 1.1 Purpose

This package provides a set of functions to create, manipulate and extract genomic data from different datasources from local and remote datasets.

These functios allow performing complex queries without the knowledge of GMQL syntax

#### 2 Dataset

The html\_vignette template includes a basic CSS theme. To override this theme you can specify your own CSS in the document metadata as follows:

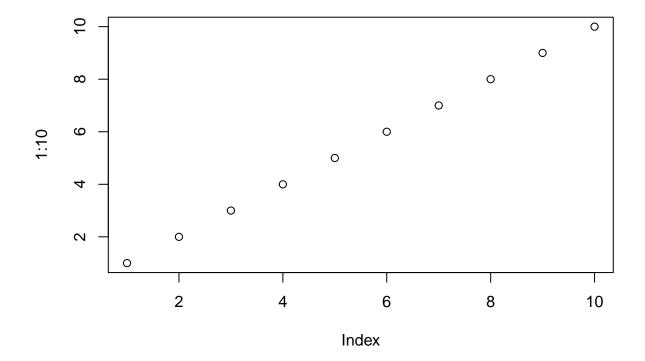
```
output:
   rmarkdown::pdf_document:
    css: mystyles.css
```

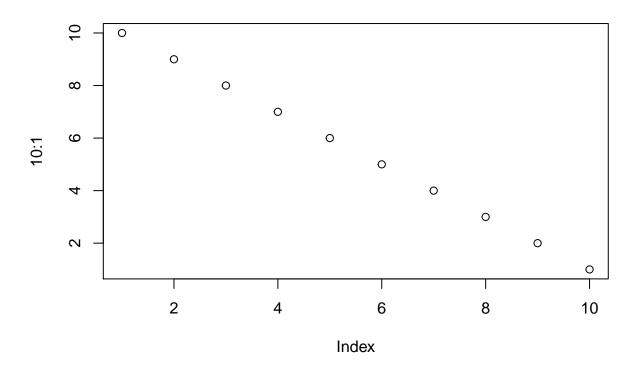
1

# **3 Environments**

The figure sizes have been customised so that you can easily put two images side-by-side.

plot(1:10) plot(10:1)





You can enable figure captions by fig\_caption: yes in YAML:

output:

rmarkdown::pdf\_document:
 fig\_caption: yes

Then you can use the chunk option fig.cap = "Your figure caption." in knitr.

#### 3.1 Local

#### 3.2 Global

## 4 Local Environment

#### 4.1 Datasource

#### 4.2 Queries

#### 4.3 Execution

You can write math expressions, e.g.  $Y = X\beta + \epsilon$ , footnotes<sup>1</sup>, and tables, e.g. using knitr::kable().

	mpg	cyl	disp	hp	drat	wt	qsec	VS	am	gear	carb
Mazda RX4	21.0	6	160.0	110	3.90	2.620	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160.0	110	3.90	2.875	17.02	0	1	4	4
Datsun 710	22.8	4	108.0	93	3.85	2.320	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258.0	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360.0	175	3.15	3.440	17.02	0	0	3	2
Valiant	18.1	6	225.0	105	2.76	3.460	20.22	1	0	3	1
Duster 360	14.3	8	360.0	245	3.21	3.570	15.84	0	0	3	4
Merc 240D	24.4	4	146.7	62	3.69	3.190	20.00	1	0	4	2
Merc 230	22.8	4	140.8	95	3.92	3.150	22.90	1	0	4	2
Merc 280	19.2	6	167.6	123	3.92	3.440	18.30	1	0	4	4

Also a quote using >:

"He who gives up [code] safety for [code] speed deserves neither." (via)

# 5 More Example

 $<sup>^{1}\</sup>mathrm{A}$  footnote here.