

Assignment 3 Results

SQLite results:**3.1.sql**

	Title
1	SM gauge fields localized on non-Abelian vortices in 6 ...
2	The moduli space of non-Abelian vortices in Yang-Mills-...
3	Chiral non-Abelian vortices and their confinement in three...
4	Stable ZZ-strings with topological polarization in two ...
5	Phases of rotating baryonic matter: non-Abelian chiral ...

3.2.sql

	Roger_count
1	103

3.3.sql

	coauthored_WuWei
1	7

3.4.sql

	null_count
1	25980

3.5.sql

	LeiYin_cite
1	8

3.6.sql - Over 155 Results

	Categorie	num_papers
1	astro-ph.CO	3812
2	astro-ph.EP	2497
3	astro-ph.GA	5154
4	astro-ph.HE	4593
5	astro-ph.IM	2662
6	astro-ph.SR	4067
7	cond-mat.dis-nn	1223
8	cond-mat.mes-hall	5380
9	cond-mat.mtrl-sci	6731
10	cond-mat.other	645
11	cond-mat.quant-gas	1451
12	cond-mat.soft	2377
13	cond-mat.stat-mech	3558
14	cond-mat.str-el	4170

3.7.sql - Over 9801 results

	Title
1	The ϵ -Story: 1976-2021
2	RGE++ : A C++ library to solve ...
3	\mathcal{L}_1 Adaptive Control for Switching Reference...
4	Stable States with Non-Zero Entropy under Broken ...
5	Bound-to-continuum potential model for the (p, γ) ...
6	On a Faster R -Linear Convergence Rate of the Barzilai-...
7	Anisotropic spheres via embedding approach in \mathbb{R}^n ...
8	Role of the rare-earth doping on the multiferroic propertie...

3.8.sql - Over 23939 results

	Title
23840	Transcendence of polynomial canonical heights
23841	Symmetric Kapranov and symmetric tropical ranks
23842	A Benchmark Dataset for Micro-video Thumbnail Selection
23843	Flag: a Self-Dual Modality for Non-Commutative ...
23844	Exponentially Handsome Proof Nets and Their ...
23845	A Braided Lambda Calculus
23846	Observation of large and all-season ozone losses over th...

3.9.sql - Over 212702 results

	fullname
211810	Zongwei Wu
211811	Zongwei Zhu
211812	Zongwen Liu
211813	Zongwu Wang
211814	Zongxia Li
211815	Zongxiang Hu
211816	Zongyan Han
211817	Zongyan He

3.10.sql

	PaperID	fullname
1	2104.11464	Indranath Sengupta
2	2104.14143	Indranath Sengupta
3	2104.14772	Indranath Sengupta
4	2105.00835	Indranath Sengupta
5	2111.12881	Indranath Sengupta

Loading csv files:

Download -> open DB Browser for SQLite -> create or have a database -> click file -> click import -> click table from csv file -> select csv file -> table should be there.

Relational algebra and calculus:**1) paper ids of all papers that have cited the paper with id '2107.06267'**

- SQL

SELECT PaperID

FROM cite

WHERE Cites = '2107.06267';

Relational algebra: $\Pi_{\text{PaperID}} \sigma_{\text{Cites} = '2107.06267'}(\text{Cite})$ Calculus (TRC): $\{t.\text{PaperID} \mid \text{Cite}(t) \text{ and } t.\text{Cites} = '2107.06267'\}$ **2) title and submitter of papers with cs.DC category, that are not cited by other papers**

- SQL

SELECT title, submits

FROM Submit

WHERE PaperID IN (

SELECT PaperID

FROM Catgories

WHERE Catgorie = 'cs.DC') AND PaperID IN (

SELECT PaperID

FROM Cite

WHERE Cites is NULL);

relational algebra: $\Pi_{\text{title}, \text{submits}}((\Pi_{\text{PaperID}} (\sigma_{\text{Category} = 'cs.DC'} \wedge \text{Cites is NULL } \text{Catgories}) \times \text{Cite})) \times \text{Submit})$ Calculus (TRC): $\{t.\text{title}, t.\text{submits} \mid \text{Submit}(t) \text{ and } \text{Catgories}(c) \text{ and } \text{Cites}(d) \text{ and } t.\text{PaperID} = c.\text{PaperID} = d.\text{PaperID} \text{ and } c.\text{Category} = 'cs.DC' \text{ and } d.\text{Cites IS NOT Null}\}$