



Run Query

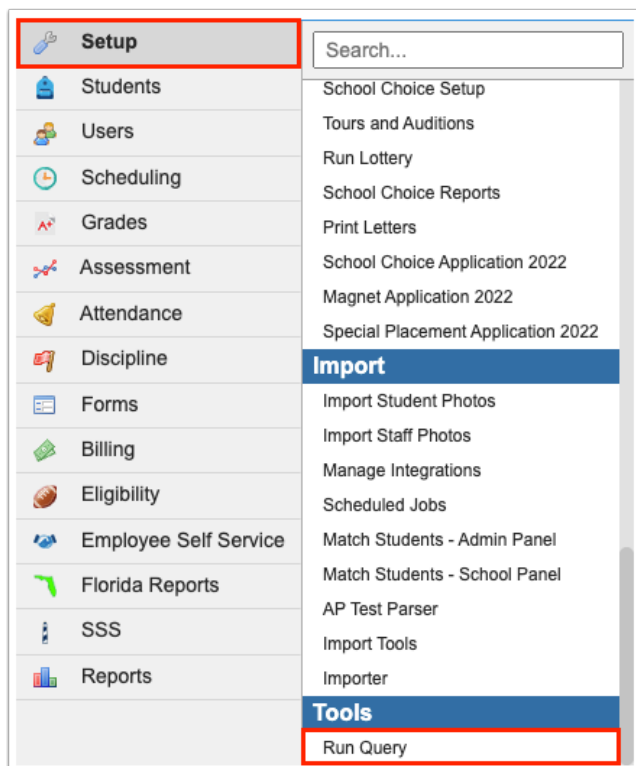
The Run Query tool is used to run custom made queries in order to review student data, user data, scheduling data, and more. The Run Query tool can also be used to update, insert, or delete data depending on profile permissions.

 In order to access Run Query, the district must enable permissions either via the configuration file or via Users > [Profiles](#) > Setup tab. The commands you can use also depend on the profile permissions enabled here; options include: Select, Explain, Set, Insert, Update, Delete, Truncate, Drop, Create, Alter, Begin, Commit, and Rollback.

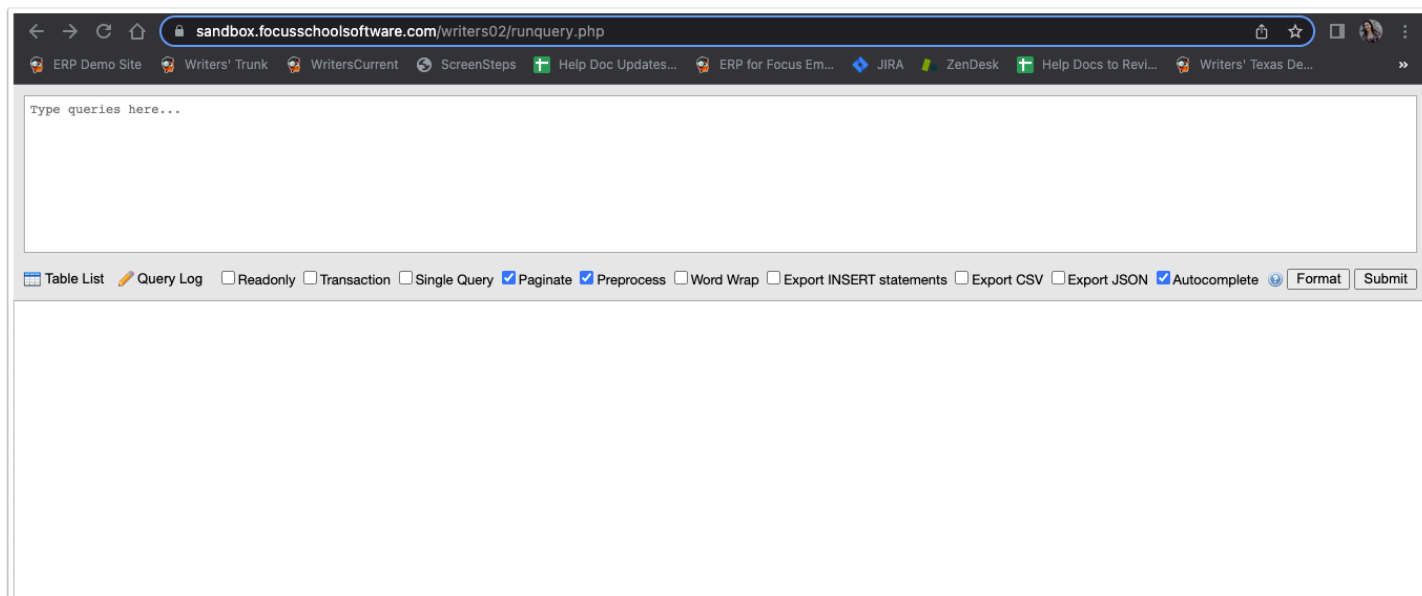
 For information on obtaining your Level 1 SQL certification and on writing queries, talk to your district's Project Coordinator or Account Executive.

Run Query

1. In the **Setup** menu, click **Run Query**.



The screen reroutes to the Run Query screen, as shown in the image below.



2. Enter queries in the text box at the top of the screen.

Type queries here...

Table List Query Log ☐ Readonly ☐ Transaction ☐ Single Query ☒ Paginate ☒ Preprocess ☐ Word Wrap ☐ Export INSERT statements ☐ Export CSV ☐ Export JSON ☒ Autocomplete Format Submit

3. To aid in writing queries, click the **Table List** for a complete list of tables.

Filter...
 GL_FISCAL_MONTH
 GL_FISCAL_YEAR
 GL_FLOAD_ACCOUNT_BALANCES_SOURCE
 GL_FLOAD_ADDRESS_3
 GL_FLOAD_ALL_ELEMENTS_REGULAR
 GL_FLOAD_BANK
 GL_FLOAD_BUDGET_SOURCE
 GL_FLOAD_CENTER
 GL_FLOAD_CHECK
 GL_FLOAD_CHECK_PR_SOURCE
 GL_FLOAD_CHECK_SOURCE
 GL_FLOAD_ELEMENTS_STRIPS_VALIDATE
 GL_FLOAD_ENUM_PO_REFERENCE_NUMBER
 GL_FLOAD_FA_ASSET_ALLOCATION
 GL_FLOAD_FA_ASSET_CATEGORIES
 GL_FLOAD_FA_BUILDINGS
 GL_FLOAD_FA_DEPARTMENTS
 GL_FLOAD_FA_DISPOSITION
 GL_FLOAD_FA_FIXED_ASSETS
 GL_FLOAD_FA_LOCATION_HISTORY
 GL_FLOAD_FA_ROOMS
 GL_FLOAD_FUNCTION

Type queries here...

Table List Query Log ☐ Readonly ☐ Transaction ☐ Single Query ☒ Paginate ☒ Preprocess ☐ Word Wrap ☐ Export Format Submit

4. Click the listed table of interest to open associated fields. You can then click the **Create Select Query** to automatically generate a query to pull data as it pertains to the select table.

Filter...
 GL_FISCAL_MONTH
 GL_FISCAL_YEAR
 Create Select Query
 closed [bigint 64 (nullable)]
 created_at [timestamp with time zone (nu
 created_by_class [varchar 255 (nullable)]
 created_by_id [bigint 64 (nullable)]
 deleted [bigint 64 (nullable)]
 district_id [bigint 64 (nullable)]
 id [bigint 64]
 internal_year_end [timestamp with time zone (nu
 m10_end [timestamp with time zone (nu
 m11_end [timestamp with time zone (nu
 m1_end [timestamp with time zone (nu
 m2_end [timestamp with time zone (nu
 m3_end [timestamp with time zone (nu
 m4_end [timestamp with time zone (nu
 m5_end [timestamp with time zone (nu
 m6_end [timestamp with time zone (nu
 m7_end [timestamp with time zone (nu
 m8_end [timestamp with time zone (nu
 m9_end [timestamp with time zone (nu
 q1_end [timestamp with time zone (nu
 q2_end [timestamp with time zone (nu
 q3_end [timestamp with time zone (nu
 updated_at [timestamp with time zone (nu
 updated_by_class [varchar 255 (nullable)]
 updated_by_id [bigint 64 (nullable)]
 year [bigint 64 (nullable)]
 year_end [timestamp with time zone (nu
 year_start [timestamp with time zone (nu

SELECT * FROM gl_fiscal_year;

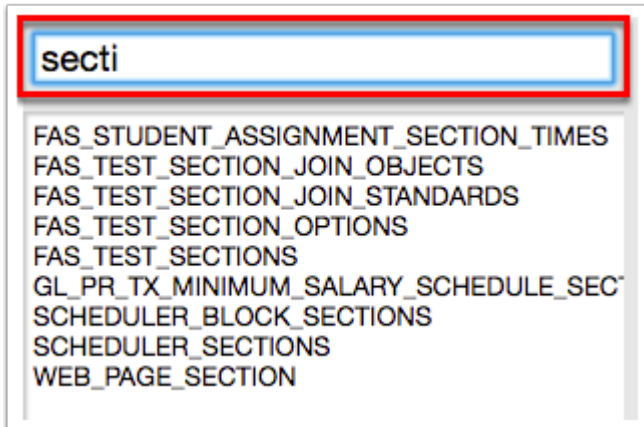
Table List Query Log ☐ Readonly ☐ Transaction ☐ Single Query ☒ Paginate ☒ Preprocess ☐ Word Wrap ☐ Export Format Submit

SELECT * FROM gl_fiscal_year

Time: 0.01220s Records: 8 Showing: 1 to 8

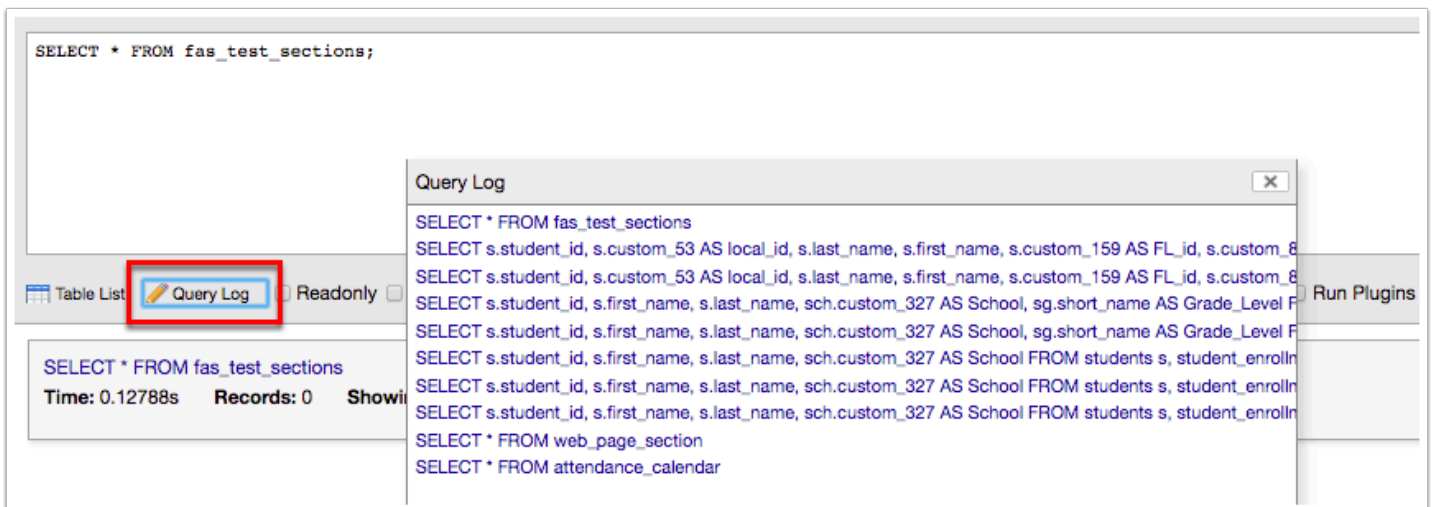
ID	DELETED	YEAR	YEAR_START	YEAR_END	Q1_END	Q2_END	Q3_END	M1_END	M2_END	M3_END	M4
182		2015	2015-07-01 00:00:00-04	2016-06-30 00:00:00-04							
183		2016	2016-07-01 00:00:00-04	2017-06-30 00:00:00-04							
184		2017	2017-07-01 00:00:00-04	2018-06-30 00:00:00-04							
43948		2014	2014-07-01 00:00:00-04	2015-06-30 00:00:00-04							
15280881		2018	2018-07-01 00:00:00-04	2019-06-30 00:00:00-04							
17559574		2019	2019-07-01 00:00:00-04	2020-06-30 00:00:00-04							
17559575		2020	2020-07-01 00:00:00-04	2021-06-30 00:00:00-04							
21086974		2021	2021-07-01 00:00:00-04	2022-06-30 00:00:00-04							

💡 Start typing the name of a table or a field to find the corresponding table in the **Filter** text box.



To close the **Table List** click the icon again.

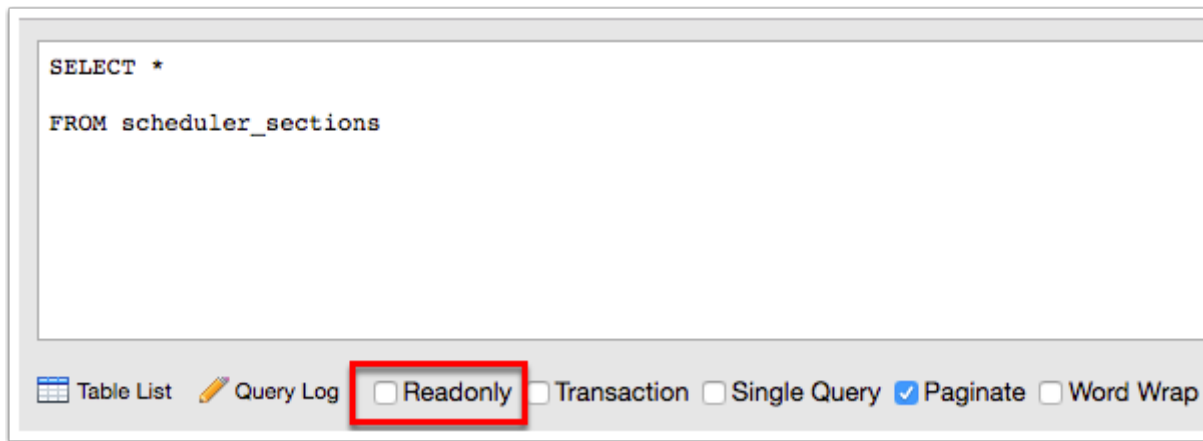
5. Click the **Query Log** icon to open a history of the last 25 queries ran.



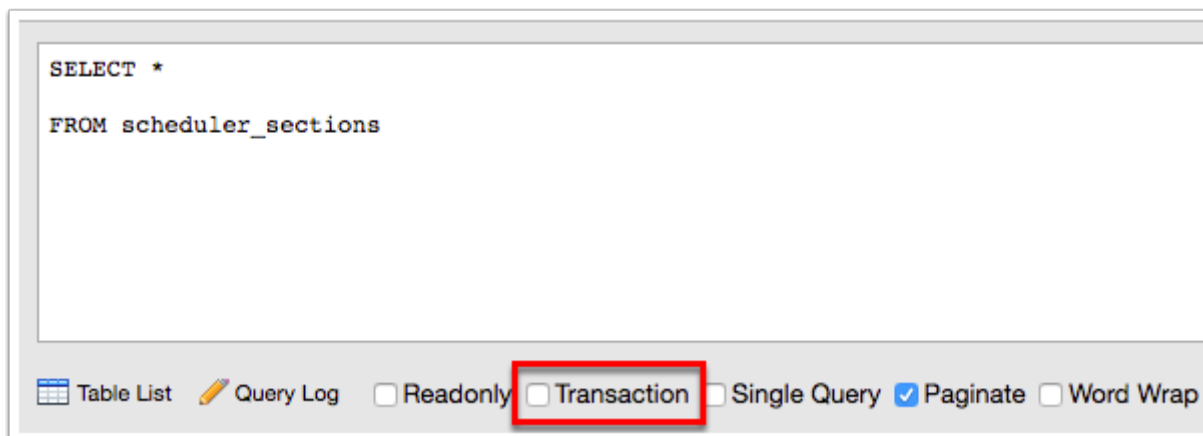
To open the query from your log, click the query link, which will populate the query text box automatically.

Click the **X** to close the Query Log.

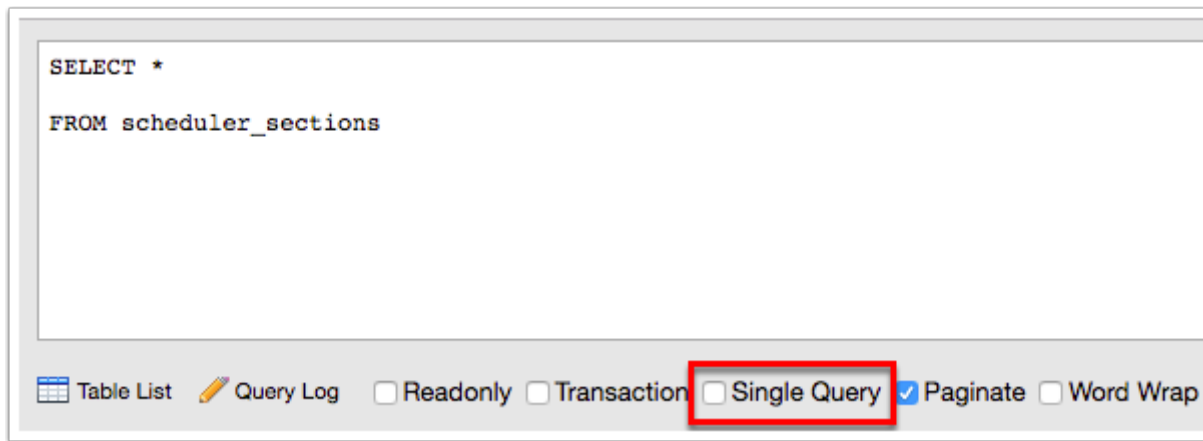
6. Click the **Readonly** text box to run queries without making actual changes to the database, which is useful when running queries that will be used to update, insert, or delete data.



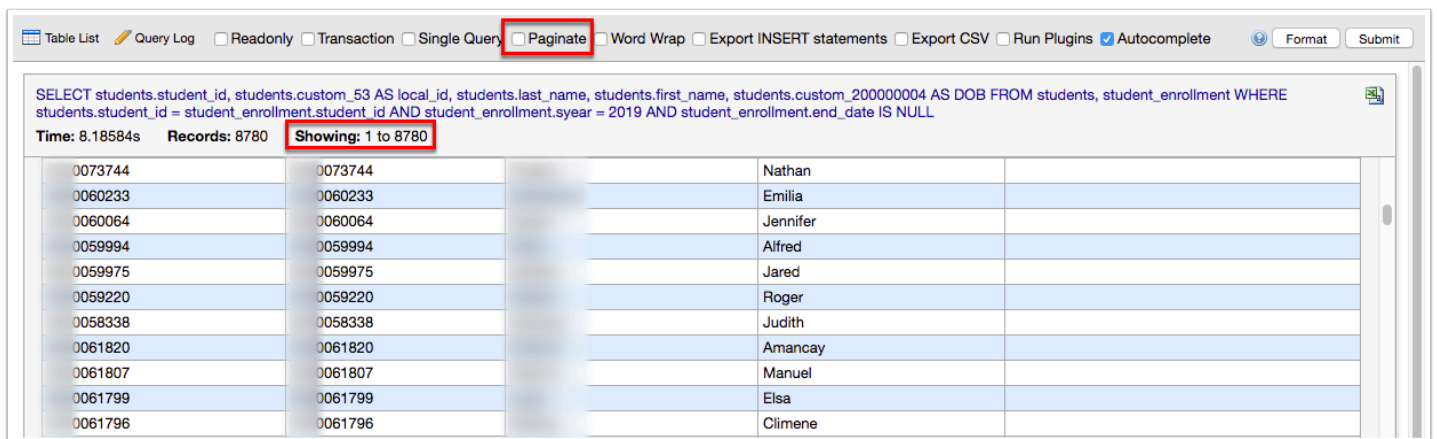
7. Click the **Transaction** check box to make all of the queries you've typed in the run text box into a single transaction instead of having a separate transactions for each query. This is useful if you're testing something and need to be able to use the ROLLBACK, TRY, etc. functionality of SQL. I.e. The essential point of a transaction is that it bundles multiple steps into a single, all-or-nothing operation. The intermediate states between the steps are not visible to other concurrent transactions, and if some failure occurs that prevents the transaction from completing, then none of the steps affect the database at all.



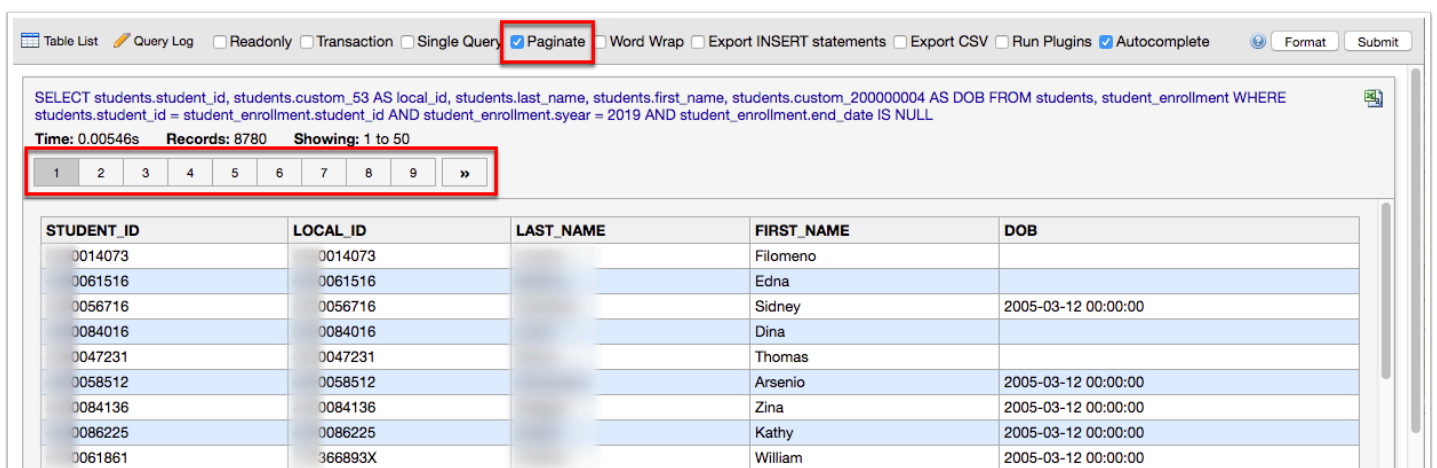
8. Click the **Single Query** check box to take every line of code and run it all at once as if it were a single query. This is important when you're creating things like stored procedures or functions since they can, and often do, use more than one query. If the Single Query check box is not selected, the PDO driver (the protocol that transmits the code you type to the database) won't know that the code should be run as a single query and will instead try and run every individual query inside it.



9. Select the **Paginate** check box to break down query results into pages as opposed to having all results displays on a single page where you would have to scroll through all of the results. The example displayed below shows results when not paginated.



The image below shows results when the Paginate check box is selected.



10. Select the **Preprocess** check box to run Postgres type casts in the SQL Server. Empty arrays will be converted to NULL instead of throwing a SQL syntax error. Queries with LIMIT/OFFSET are converted to the cross-DB OFFSET/FETCH syntax automatically.

SELECT * FROM students ORDER BY student_id LIMIT 1 OFFSET 1;

☒ Table List
 ☒ Query Log
 ☐ Readonly
 ☐ Transaction
 ☐ Single Query
 ☒ Paginate
 ☒ Preprocess
 ☐ Word Wrap
 ☐ Export INSERT statements
 ☐ Export CSV
 ☐ Export JSON

SELECT * FROM students ORDER BY student_id LIMIT 1 OFFSET 1
 Time: 0.00544s Records: 1 Showing: 1 to 1

STUDENT_ID	LAST_NAME	FIRST_NAME	MIDDLE_NAME	NAME_SUFFIX	USERNAME	PASSWORD	LAST_LOGIN	FAILED_LOGIN	PROFILE_ID	FORCE_PASSWORD_CHANGE	LAST_U
999901205	Williams	R	L							N	

11. Select the **Word Wrap** check box to format the text in the query results in word wrap; i.e. if the information goes beyond the provided area, you can wrap the text and extend the box to make the information more readable.

☒ Paginate
 ☒ Word Wrap
 ☐ Export INSERT statements

EATED_AT	UPDATED_BY_CLASS	UPDATED_BY_ID	UPDATED_AT
19-06-03 11:42.917642-	SISUser	3517	2019-06-11 09:04:26.759436-04
19-06-03 11:56.836393-	SISUser	3517	2019-06-11 09:04:26.809044-04
19-06-03 12:09.701449-	SISUser	3517	2019-06-11 09:04:26.862936-04
19-06-03 13:17.859903-	SISUser	3517	2019-06-11 09:04:26.906925-04

☒ Paginate
 ☐ Word Wrap
 ☐ Export INSERT statements

UPDATED_BY_CLASS	UPDATED_BY_ID	UPDATED_AT
SISUser	3517	2019-06-11 09:04:26.759436-04
SISUser	3517	2019-06-11 09:04:26.809044-04
SISUser	3517	2019-06-11 09:04:26.862936-04
SISUser	3517	2019-06-11 09:04:26.906925-04
SISUser	3517	2019-06-11 09:04:26.971138-04
SISUser	3517	2019-06-11 09:04:27.033268-04
SISUser	3517	2019-06-11 09:04:27.090403-04
SISUser	3517	2019-06-11 09:04:27.149263-04
SISUser	3517	2019-06-11 09:04:27.209852-04

12. Select the **Export INSERT statements** check box to format the output of a SELECT query into an INSERT query syntax with a [table] placeholder, which allows you to update data using the table to which data is to be inserted.

Table List Query Log ☐ Readonly ☐ Transaction ☐ Single Query ☒ Paginate ☐ Word Wrap ☒ Export INSERT statements ☐ Export CSV

```
SELECT s.student_id, s.last_name, s.first_name, ap.period_id FROM students s JOIN student_enrollment se ON (s.student_id = se.student_id) JOIN attendance_period ap ON (s.student_id = ap.student_id) WHERE se.year = 2019 AND se.end_date IS NULL AND ap.school_date >= '2019-06-01'
```

Time: 0.00746s Records: 115554 Showing: 1 to 50

1 2 3 4 5 6 7 8 9 »

INSERT Statement

INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1497');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1496');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1494');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1493');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1495');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1496');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1494');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1493');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1495');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1497');

13. Select the **Export CSV** check box to download the query results in a CSV file to your computer.

Table List Query Log ☐ Readonly ☐ Transaction ☐ Single Query ☒ Paginate ☐ Word Wrap ☐ Export INSERT statements ☒ Export CSV ☐ Run Plugins ☒ Autocomplete

```
SELECT s.student_id, s.last_name, s.first_name, ap.period_id FROM students s JOIN student_enrollment se ON (s.student_id = se.student_id) JOIN attendance_period ap ON (s.student_id = ap.student_id) WHERE se.year = 2019 AND se.end_date IS NULL AND ap.school_date >= '2019-06-01'
```

Time: 0.00746s Records: 115554 Showing: 1 to 50

1 2 3 4 5 6 7 8 9 »

INSERT Statement

INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1497');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1496');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1494');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1493');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1495');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1496');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1494');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1493');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1495');
INSERT INTO [table] (STUDENT_ID, LAST_NAME, FIRST_NAME, PERIOD_ID) values('0061516', 'her', 'Edna', '1497');

RunQueryResults.csv ^ Show All X

14. Select the **Export JSON** check box to download the query results in a JSON file (JavaScript Object Notation).

Table List Query Log ☐ Readonly ☐ Transaction ☐ Single Query ☒ Paginate ☐ Preprocess ☐ Word Wrap ☐ Export INSERT statements ☐ Export CSV ☐ Export JSON ☒ Autocomplete

SELECT * FROM address_field_flags

Time: 0.00139s Records: 8 Showing: 1 to 8

ID	TITLE	ADDRESS	CONTACT_DETAILS	CONTACT	PHONE_NUMBERS	DATABASE_COLUMN_NAME	CONTACT_DETAIL_TITLE	CREATED_BY_CLASS	CREATED_BY
1	Unlisted	1	1		1	unlisted			
2	Callout	1	1		1	callout			
3	Blocked	1	1		1	blocked			
4	Custody			1		custody			
5	Emergency			1		emergency			
6	Pick Up			1		pick_up			
7	SMS		1		1	sms		SISUser	23212
8	UNSUBSCRIBE		1		1	unsubscribe		SISUser	23212

RunQueryResults.json ^

15. Select the **Autocomplete** check box to allow the system to make recommendation upon typing queries; i.e. when you begin typing the name of a table, several possible options will displays based on the information typed. From here, you can select the applicable option instead of having to type it out.

Select *

From scheduler

- scheduler_terms**
- scheduler_info
- scheduler_link
- scheduler_lock
- scheduler_periods

Table List Query Log ☐ Readonly ☐ Transaction ☐ Single Query ☒ Paginate ☒ Preprocess ☐ Word Wrap ☐ Export INSERT statements ☐ Export CSV ☐ Export JSON ☒ Autocomplete Format Submit

16. Click the ? icon for Help, which includes Keyboard Shortcuts and Tips.

Help

Keyboard Shortcuts:

Action	Shortcut
Submit queries	Ctrl + Enter
Format queries	Alt + F
Toggle the table list	Alt + T
Toggle the query log	Alt + L
Toggle this help popup	Alt + H
Close all popups	Esc
Toggle autocomplete functionality	Alt + A
Open the autocomplete box	Ctrl + Space
Select the highlighted item in the autocomplete box	Tab
Close the autocomplete box	Esc

Tips:

- The autocomplete box performs fuzzy text searching, alleviating problems from typos.
- Clicking a row in a result table will highlight it, making it easier to follow as you scroll around the table
- Clicking a query in a result table or query log will insert it into the query text area.
- Shift + Clicking a query in a result table or query log will append it to the query text area while keeping your existing queries.

Format

Submit

student_id =

Click the **X** to close the Help window.

17. Click the **Format** button after entering a query in the provided text box in order to format the query.

The query displayed below is an example of non-formatted.

SELECT * FROM fas_test_sections;

Table List

Query Log

Readonly

Transaction

Single Query

Paginate

Word Wrap

Export INSERT statements

Format

Submit

The query displayed below is an example of formatted.

SELECT

*

FROM

fas_test_sections;

Table List

Query Log

Readonly

Transaction

Single Query

Paginate

Word Wrap

Export INSERT statements

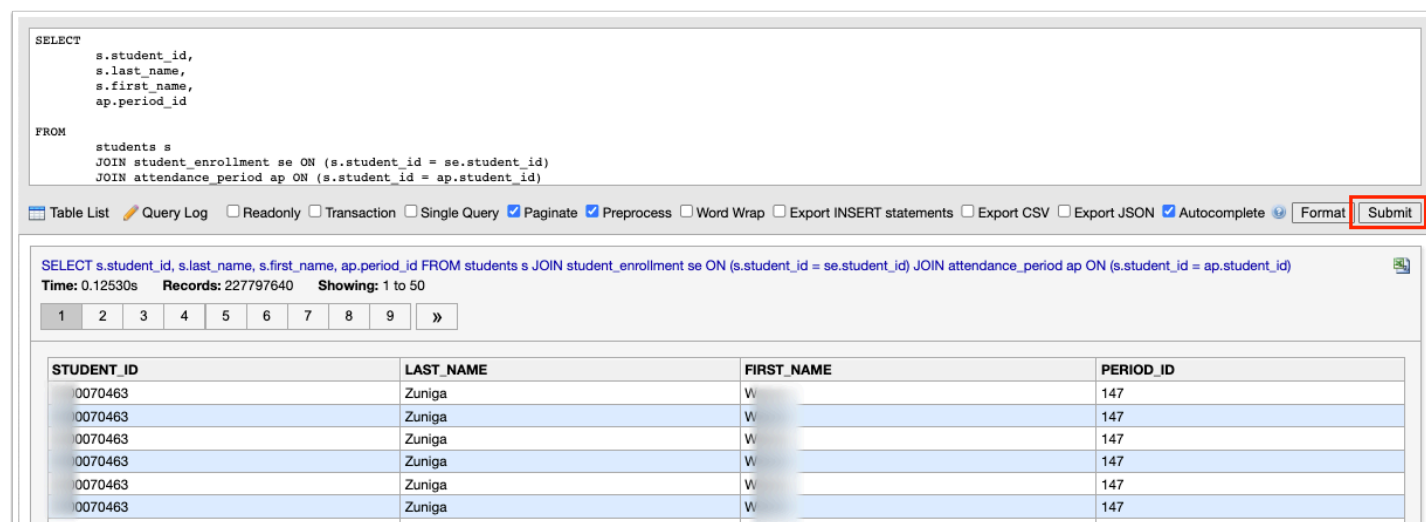
Format

Submit

Run Query

Page 10

18. Once a query has been entered and all selections have been made, click **Submit** for query results, which display on the bottom of the screen.



The screenshot shows a database query interface. At the top, a text box contains the following SQL query:

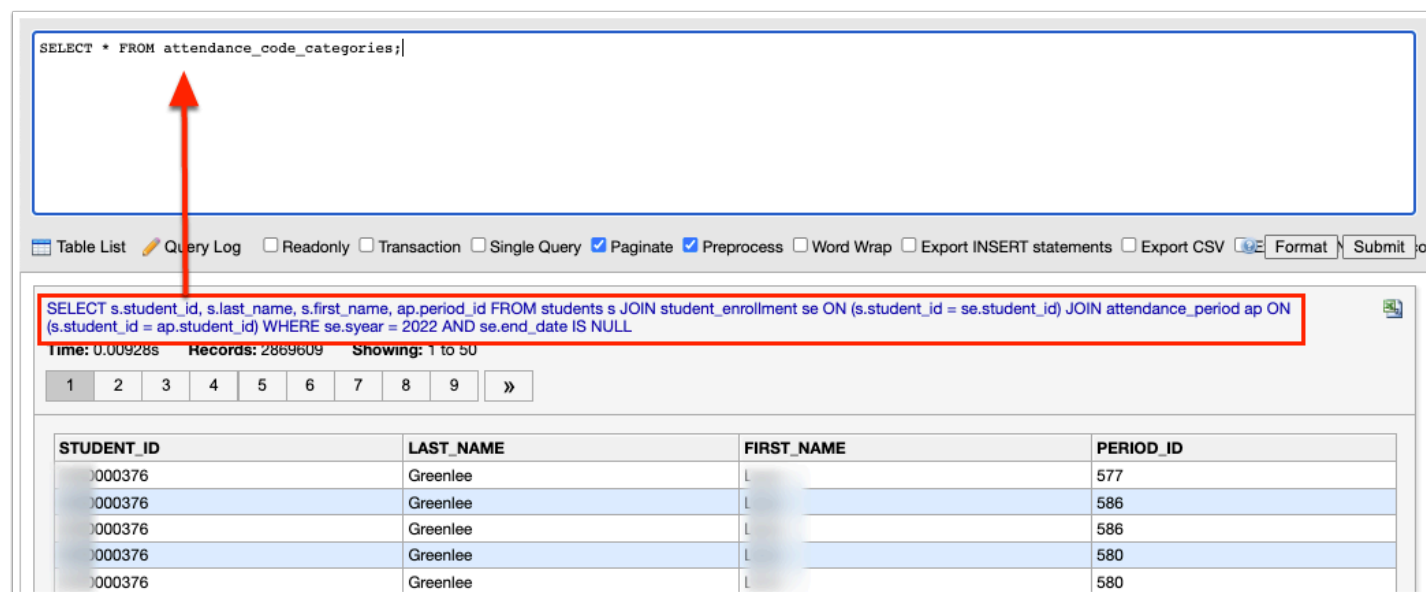
```
SELECT
  s.student_id,
  s.last_name,
  s.first_name,
  ap.period_id
FROM
  students s
  JOIN student_enrollment se ON (s.student_id = se.student_id)
  JOIN attendance_period ap ON (s.student_id = ap.student_id)
```

Below the query box, there are several checkboxes for query options: ☐ Table List, ☒ Query Log, ☐ Readonly, ☐ Transaction, ☐ Single Query, ☒ Paginate, ☒ Preprocess, ☐ Word Wrap, ☐ Export INSERT statements, ☐ Export CSV, ☐ Export JSON, ☒ Autocomplete, . The **Submit** button is highlighted with a red box.

Below the options, the query results are displayed. The query is: `SELECT s.student_id, s.last_name, s.first_name, ap.period_id FROM students s JOIN student_enrollment se ON (s.student_id = se.student_id) JOIN attendance_period ap ON (s.student_id = ap.student_id)`. The results show 6 records for student ID 0070463, all with last name 'Zuniga' and first name 'W'. The period IDs are 147.

STUDENT_ID	LAST_NAME	FIRST_NAME	PERIOD_ID
0070463	Zuniga	W	147
0070463	Zuniga	W	147
0070463	Zuniga	W	147
0070463	Zuniga	W	147
0070463	Zuniga	W	147
0070463	Zuniga	W	147

19. The results displayed is based on the query displayed. If the query is changed in the provided text box, you can repopulate the text box with the previously run query by clicking the query link.



The screenshot shows the same database query interface. The query box now contains: `SELECT * FROM attendance_code_categories;`. A red arrow points from the **Submit** button of the previous query to this new query box.

Below the query box, the same options are visible. The **Submit** button is highlighted with a red box.

Below the options, the query results are displayed. The query is: `SELECT s.student_id, s.last_name, s.first_name, ap.period_id FROM students s JOIN student_enrollment se ON (s.student_id = se.student_id) JOIN attendance_period ap ON (s.student_id = ap.student_id) WHERE se.year = 2022 AND se.end_date IS NULL`. The results show 6 records for student ID 000376, all with last name 'Greenlee' and first name 'L'. The period IDs are 577, 586, 586, 580, and 580.

STUDENT_ID	LAST_NAME	FIRST_NAME	PERIOD_ID
000376	Greenlee	L	577
000376	Greenlee	L	586
000376	Greenlee	L	586
000376	Greenlee	L	580
000376	Greenlee	L	580

20. Click the **Excel** icon to download the query results to an Excel spreadsheet.

Table List Query Log ☐ Readonly ☐ Transaction ☐ Single Query ☒ Paginate ☒ Preprocess ☐ Word Wrap ☐ Export INSERT statements ☐ Export CSV

```
SELECT s.student_id, s.last_name, s.first_name, ap.period_id FROM students s JOIN student_enrollment se ON (s.student_id = se.student_id) JOIN attendance_period ap ON (s.student_id = ap.student_id) WHERE se.year = 2022 AND se.end_date IS NULL
```

Time: 0.00928s Records: 2869609 Showing: 1 to 50

1 2 3 4 5 6 7 8 9 »

STUDENT_ID	LAST_NAME	FIRST_NAME	PERIOD_ID
000376	Greenlee	L	577
000376	Greenlee	L	586
000376	Greenlee	L	586
000376	Greenlee	L	580

RunQueryResults

Home Insert Draw Page Layout Formulas Data Review View

Calibri (Body) 12 A A- B I U Merge & Center General \$ % 0.00 0.00 Conditional Formatting Format as Table Cell Styles

A1 x fx STUDENT_ID

	A	B	C	D	E	F	G	H	I	J
1	STUDENT_ID	LAST_NAME	FIRST_NAME	PERIOD_ID						
2	000376	Greenlee	L	577						
3	000376	Greenlee	L	586						
4	000376	Greenlee	L	586						
5	000376	Greenlee	L	580						
6	000376	Greenlee	L	580						
7	000376	Greenlee	L	578						
8	000376	Greenlee	L	583						
9	000376	Greenlee	L	584						
10	000376	Greenlee	L	577						

The **Time** is took for the query to pull the applicable results displays, as well as the number of **Records**, and the number of records **Showing**.

Table List Query Log ☐ Readonly ☐ Transaction ☐ Single Query ☒ Paginate ☒ Preprocess ☐ Word Wrap

```
SELECT s.student_id, s.last_name, s.first_name, ap.period_id FROM students s JOIN student_enrollment se ON (s.student_id = se.student_id) WHERE se.year = 2022 AND se.end_date IS NULL
```

Time: 0.00928s Records: 2869609 Showing: 1 to 50

1 2 3 4 5 6 7 8 9 »

If the query results are paginated, click the page number to jump to the page or click the double arrows to jump to the last set of pages.

Table List Query Log ☐ Readonly ☐ Transaction ☐ Single Query ☒ Paginate ☒ Preprocess ☐ Word Wrap

```
SELECT s.student_id, s.last_name, s.first_name, ap.period_id FROM students s JOIN student_enrollment se ON (s.student_id = se.student_id) WHERE se.year = 2022 AND se.end_date IS NULL
```

Time: 0.00928s Records: 2869609 Showing: 1 to 50

1 2 3 4 5 6 7 8 9 »

To sort results, you can click the headers. Click once for ascending results; click twice for descending results. In the image displayed, LAST_NAME has been clicked once.

STUDENT_ID	LAST_NAME	FIRST_NAME	PERIOD_ID
0017903	Ab	Ki	1502
0017903	Ab	Ki	1503
0017903	Ab	Ki	1501
0082099	Ab	Ri	1491
0082099	Ab	Ri	1495
0082099	Ab	Ri	1494
0082099	Ab	Ri	1496
0017903	Ab	Ki	1505
0017903	Ab	Ki	1195