

# Single table

## Query

```
SELECT anon_1.type,
anon_1.description,
anon_1.input_of_id,
anon_1.output_of_id,
anon_1.id,
anon_1.string_value,
anon_1.string_regex,
anon_1.json_value,
anon_1.json_schema,
anon_1.json_initial_value,
anon_1.json_formly_schema,
anon_1.boolean_value,
anon_1.hash_value,
anon_1.domain_value,
anon_1.url_value,
anon_1.ip_value,
anon_1.date_value,
anon_1.datetime_value,
anon_1.email_address_value,
anon_1.email_message_value,
anon_1.file_ref_value,
anon_1.file_value,
__parent_id,
__row_number
FROM (SELECT task_input_output_1.type AS type,
task_input_output_1.description AS description,
task_input_output_1.input_of_id AS input_of_id,
task_input_output_1.output_of_id AS output_of_id,
task_input_output_1.id AS id,
task_input_output_1.string_value AS string_value,
task_input_output_1.string_regex AS string_regex,
task_input_output_1.json_value AS json_value,
task_input_output_1.json_schema AS json_schema,
task_input_output_1.json_initial_value AS json_initial_value,
task_input_output_1.json_formly_schema AS json_formly_schema,
task_input_output_1.boolean_value AS boolean_value,
task_input_output_1.hash_value AS hash_value,
task_input_output_1.domain_value AS domain_value,
task_input_output_1.url_value AS url_value,
task_input_output_1.ip_value AS ip_value,
task_input_output_1.date_value AS date_value,
task_input_output_1.datetime_value AS datetime_value,
task_input_output_1.email_address_value AS email_address_value,
task_input_output_1.email_message_value AS email_message_value,
task_input_output_1.file_ref_value AS file_ref_value,
task_input_output_1.file_value AS file_value,
anon_2.task_id AS __parent_id,
row_number() OVER (PARTITION BY anon_2.task_id ORDER BY task_input_output_1.id DESC) AS __row_number
FROM task_input_output AS task_input_output_1
JOIN (SELECT task.weight AS task_weight,
task.name AS task_name,
task.description AS task_description,
task.created AS task_created,
task.last_updated AS task_last_updated,
task.due_date AS task_due_date,
task.state AS task_state,
task.stage_id AS task_stage_id,
task.is_automated AS task_is_automated,
task.type AS task_type_1,
task.task_type AS task_task_type,
task.processing_queue AS task_processing_queue,
task.created_by_id AS task_created_by_id,
task.id AS task_id,
generic_task.id AS generic_task_id,
decision_task.decision AS decision_task_decision,
decision_task.id AS decision_task_id
FROM task
LEFT OUTER JOIN generic_task ON generic_task.id = task.id
LEFT OUTER JOIN decision_task ON decision_task.id = task.id) AS anon_2
ON anon_2.task_id = task_input_output_1.input_of_id
WHERE anon_2.task_id IN (8)) AS anon_1
WHERE __row_number <= 1
```

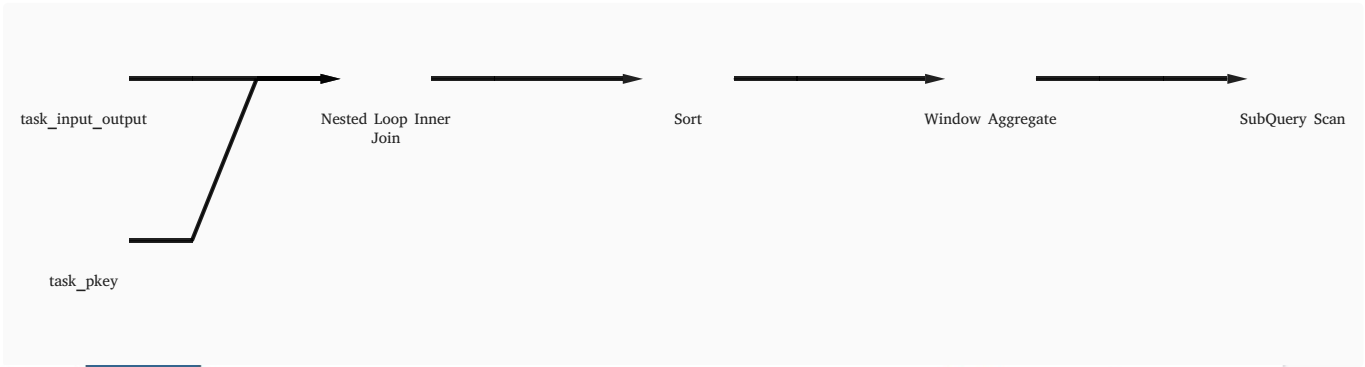
## Execution times

Try	Time (ms)
1	121
3	185
4	73

5	121
6	87
7	70
8	109
9	115
10	70

## Average execution time

95.1 ms



#	Node	Rows	Loops
		Actual	
1.	→ Subquery Scan (rows=1 loops=1) Filter: (anon_1.__row_number <= 1) Rows Removed by Filter: 0	1	1
2.	→ Window Aggregate (rows=1 loops=1)	1	1
3.	→ Sort (rows=1 loops=1)	1	1
4.	→ Nested Loop Inner Join (rows=1 loops=1)	1	1
5.	→ Seq Scan on task_input_output as task_input_output_1 (rows=...) Filter: (input_of_id = 8) Rows Removed by Filter: 70	1	1
6.	→ Index Only Scan using task_pkey on task as task (rows=1 loops=...) Index Cond: (id = 8)	1	1

## Joined table

### Query

```
SELECT anon_1.type,
anon_1.description,
anon_1.input_of_id,
anon_1.output_of_id,
anon_1.id,
anon_1.id_1,
anon_1.string_value,
anon_1.string_regex,
anon_1.id_2,
anon_1.json_value,
anon_1.json_schema,
anon_1.json_initial_value,
anon_1.json_formly_schema,
anon_1.id_3,
anon_1.boolean_value,
anon_1.id_4,
anon_1.hash_value,
anon_1.id_5,
anon_1.domain_value,
anon_1.id_6,
anon_1.url_value,
anon_1.id_7,
anon_1.ip_value,
```

```

anon_1.id_8,
anon_1.date_value,
anon_1.id_9,
anon_1.datetime_value,
anon_1.id_10,
anon_1.email_address_value,
anon_1.id_11,
anon_1.email_message_value,
anon_1.id_12,
anon_1.file_ref_value,
anon_1.id_13,
anon_1.file_value,
__parent_id,
__row_number
FROM (SELECT task_input_output_1.type
task_input_output_1.description
task_input_output_1.input_of_id
task_input_output_1.output_of_id
task_input_output_1.id
string_input_output_1.id
string_input_output_1.string_value
string_input_output_1.string_regex
json_input_output_1.id
json_input_output_1.json_value
json_input_output_1.json_schema
json_input_output_1.json_initial_value
json_input_output_1.json_formly_schema
bool_input_output_1.id
bool_input_output_1.boolean_value
hash_input_output_1.id
hash_input_output_1.hash_value
domain_input_output_1.id
domain_input_output_1.domain_value
url_input_output_1.id
url_input_output_1.url_value
ip_input_output_1.id
ip_input_output_1.ip_value
date_input_output_1.id
date_input_output_1.date_value
date_time_input_output_1.id
date_time_input_output_1.datetime_value
email_address_input_output_1.id
email_address_input_output_1.email_address_value
email_message_input_output_1.id
email_message_input_output_1.email_message_value
file_ref_input_output_1.id
file_ref_input_output_1.file_ref_value
file_input_output_1.id
file_input_output_1.file_value
anon_2.task_id
row_number() OVER (PARTITION BY anon_2.task_id ORDER BY task_input_output_1.id DESC)
FROM task_input_output AS task_input_output_1
LEFT OUTER JOIN string_input_output AS string_input_output_1
ON string_input_output_1.id = task_input_output_1.id
LEFT OUTER JOIN json_input_output AS json_input_output_1
ON json_input_output_1.id = task_input_output_1.id
LEFT OUTER JOIN bool_input_output AS bool_input_output_1
ON bool_input_output_1.id = task_input_output_1.id
LEFT OUTER JOIN hash_input_output AS hash_input_output_1
ON hash_input_output_1.id = task_input_output_1.id
LEFT OUTER JOIN domain_input_output AS domain_input_output_1
ON domain_input_output_1.id = task_input_output_1.id
LEFT OUTER JOIN url_input_output AS url_input_output_1 ON url_input_output_1.id = task_input_output_1.id
LEFT OUTER JOIN ip_input_output AS ip_input_output_1 ON ip_input_output_1.id = task_input_output_1 id
LEFT OUTER JOIN date_input_output AS date_input_output_1
ON date_input_output_1.id = task_input_output_1.id
LEFT OUTER JOIN date_time_input_output AS date_time_input_output_1
ON date_time_input_output_1.id = task_input_output_1.id
LEFT OUTER JOIN email_address_input_output AS email_address_input_output_1
ON email_address_input_output_1.id = task_input_output_1.id
LEFT OUTER JOIN email_message_input_output AS email_message_input_output_1
ON email_message_input_output_1.id = task_input_output_1 id
LEFT OUTER JOIN file_ref_input_output AS file_ref_input_output_1
ON file_ref_input_output_1.id = task_input_output_1 id
LEFT OUTER JOIN file_input_output AS file_input_output_1
ON file_input_output_1.id = task_input_output_1 id
JOIN (SELECT task.weight AS task_weight,
task.name AS task_name,
task.description AS task_description,
task.created AS task_created,
task.last_updated AS task_last_updated,
task.due_date AS task_due_date,
task.state AS task_state,
task.stage_id AS task_stage_id,
task.is_automated AS task_is_automated,
task.type AS task_type_1,
task.task_type AS task_task_type,
task.processing_queue AS task_processing_queue,
task.created_by_id AS task_created_by_id,
task.id AS task_id,
generic_task.id AS generic_task_id,
decision_task.decision AS decision_task_decision,
decision_task.id AS decision_task_id
FROM task
LEFT OUTER JOIN generic_task ON generic_task.id = task.id
LEFT OUTER JOIN decision_task ON decision_task.id = task.id) AS anon_2
ON anon_2.task_id = task_input_output_1.output_of_id
WHERE anon_2.task_id IN (64)) AS anon_1
WHERE __row_number <= 1
AS type,
AS description,
AS input_of_id,
AS output_of_id,
AS id,
AS id_1,
AS string_value,
AS string_regex,
AS id_2,
AS json_value,
AS json_schema,
AS json_initial_value,
AS json_formly_schema,
AS id_3,
AS boolean_value,
AS id_4,
AS hash_value,
AS id_5,
AS domain_value,
AS id_6,
AS url_value,
AS id_7,
AS ip_value,
AS id_8,
AS date_value,
AS id_9,
AS datetime_value,
AS id_10,
AS email_address_value,
AS id_11,
AS email_message_value,
AS id_12,
AS file_ref_value,
AS id_13,
AS file_value,
AS __parent_id,
AS __row_number

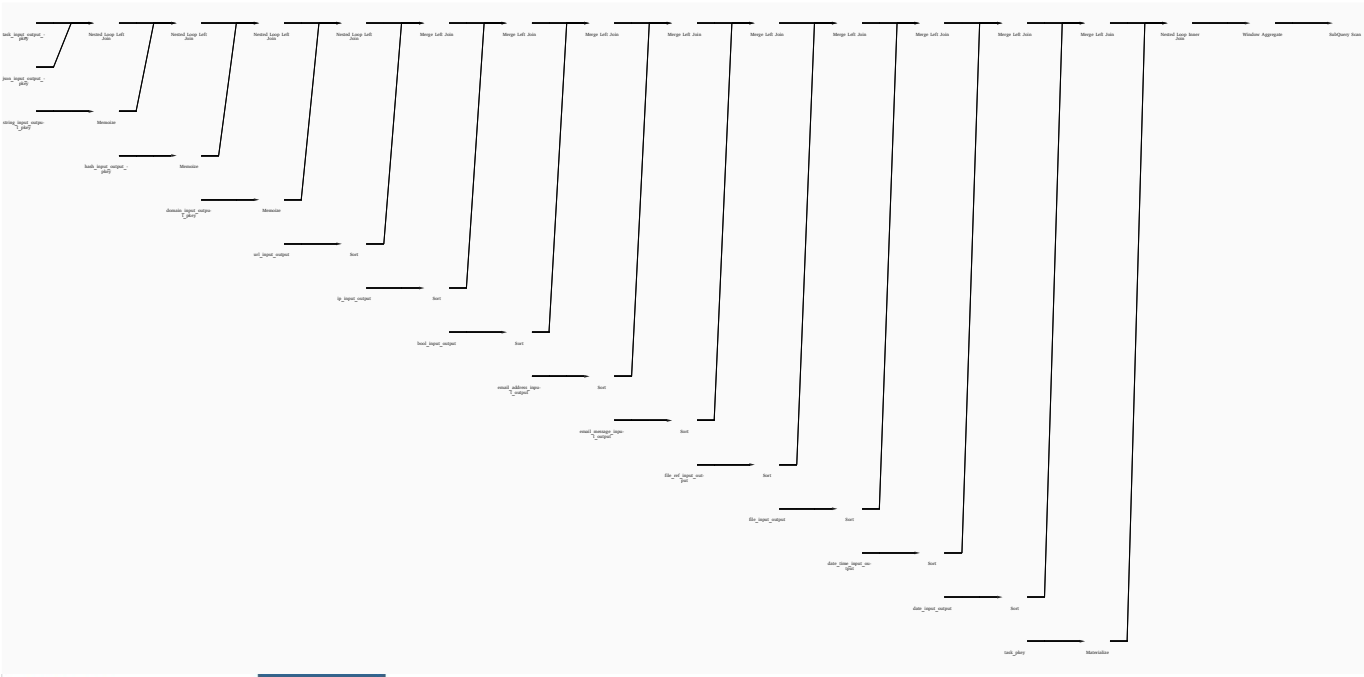
```

Execution times

Try	Time (ms)
1	1037
3	1073
4	815
5	1046
6	1016
7	1003
8	1135
9	1002
10	1293

Average execution time

942.0 ms



Graphical Analysis Statistics			Rows	
#	Node	Actual	Loops	
1.	→ Subquery Scan (rows=1 loops=1) Filter: (anon_1.__row_number <= 1) Rows Removed by Filter: 0	1	1	
2.	→ Window Aggregate (rows=1 loops=1)	1	1	
3.	→ Nested Loop Inner Join (rows=1 loops=1)	1	1	
4.	→ Merge Left Join (rows=1 loops=1)	1	1	
5.	→ Merge Left Join (rows=1 loops=1)	1	1	
6.	→ Merge Left Join (rows=1 loops=1)	1	1	
7.	→ Merge Left Join (rows=1 loops=1)	1	1	
8.	→ Merge Left Join (rows=1 loops=1)	1	1	
9.	→ Merge Left Join (rows=1 loops=1)	1	1	
10.	→ Merge Left Join (rows=1 loops=1)	1	1	
11.	→ Merge Left Join (rows=1 loops=1)	1	1	
12.	→ Merge Left Join (rows=1 loops=1)	1	1	

13.	→ Nested Loop Left Join (rows=1 loops=1)	1	1
14.	→ Nested Loop Left Join (rows=1 loops=1)	1	1
15.	→ Nested Loop Left Join (rows=1 loops=1)	1	1
16.	→ Nested Loop Left Join (rows=1 loops=1)	1	1
17.	→ Index Scan using task_input_output... Filter: (output_of_id = 64) Rows Removed by Filter: 85	1	1
18.	→ Index Scan using json_input_output... Index Cond: (id = task_input_output_1.id)	0	1
19.	→ Memoize (rows=1 loops=1) Buckets: Batches: Memory Usage: 1 kB	1	1
20.	→ Index Scan using string_input_output... Index Cond: (id = task_input_output_1.id)	1	1
21.	→ Memoize (rows=0 loops=1) Buckets: Batches: Memory Usage: 1 kB	0	1
22.	→ Index Scan using hash_input_output_pk... Index Cond: (id = task_input_output_1.id)	0	1
23.	→ Memoize (rows=0 loops=1) Buckets: Batches: Memory Usage: 1 kB	0	1
24.	→ Index Scan using domain_input_output_pkey... Index Cond: (id = task_input_output_1.id)	0	1
25.	→ Sort (rows=1 loops=1)	1	1
26.	→ Seq Scan on url_input_output as url_input_output...	1	1
27.	→ Sort (rows=0 loops=1)	0	1
28.	→ Seq Scan on ip_input_output as ip_input_output_1 (ro...	0	1
29.	→ Sort (rows=1 loops=1)	1	1
30.	→ Seq Scan on bool_input_output as bool_input_output_1 (ro...	1	1
31.	→ Sort (rows=0 loops=1)	0	1
32.	→ Seq Scan on email_address_input_output as email_address_inp...	0	1
33.	→ Sort (rows=0 loops=1)	0	1
34.	→ Seq Scan on email_message_input_output as email_message_input...	0	1
35.	→ Sort (rows=0 loops=1)	0	1
36.	→ Seq Scan on file_ref_input_output as file_ref_input_output_1 (rows=0 loo...	0	1
37.	→ Sort (rows=0 loops=1)	0	1
38.	→ Seq Scan on file_input_output as file_input_output_1 (rows=0 loops=1)	0	1
39.	→ Sort (rows=0 loops=1)	0	1
40.	→ Seq Scan on date_time_input_output as date_time_input_output_1 (rows=0 loops=1)	0	1
41.	→ Sort (rows=0 loops=1)	0	1
42.	→ Seq Scan on date_input_output as date_input_output_1 (rows=0 loops=1)	0	1
43.	→ Materialize (rows=1 loops=1)	1	1
44.	→ Index Only Scan using task_pkey on task as task (rows=1 loops=1) Index Cond: (id = 64)	1	1