

1.1. Data type of columns in a table (In PostgreSQL):

For Geolocation Table :

```
SELECT table_name, column_name, data_type, is_nullable
from INFORMATION_SCHEMA.COLUMNS
where table_catalog = 'target' and table_schema = 'public'
      and table_name = 'geolocations';
```

table_name	column_name	data_type	is_nullable
abc Filter...	abc Filter...	abc Filter...	abc Filter...
geolocations	geolocation_zip_code_prefix	character varying	NO
geolocations	geolocation_lat	numeric	NO
geolocations	geolocation_lng	numeric	NO
geolocations	geolocation_city	character varying	NO
geolocations	geolocation_state	character	NO

For Customers Table:

```
SELECT table_name, column_name, data_type, is_nullable
from INFORMATION_SCHEMA.COLUMNS
where table_catalog = 'target' and table_schema = 'public'
      and table_name = 'customers';
```

table_name	column_name	data_type	is_nullable
abc Filter...	abc Filter...	abc Filter...	abc Filter...
customers	customer_id	character varying	NO
customers	customer_unique_id	character varying	NO
customers	customer_zip_code_prefix	character varying	NO
customers	customer_city	character varying	NO
customers	customer_state	character varying	NO





For Seller Table:

```
SELECT table_name, column_name, data_type, is_nullable
from INFORMATION_SCHEMA.COLUMNS
where table_catalog = 'target' and table_schema = 'public'
      and table_name = 'sellers';
```

table_name	column_name	data_type	is_nullable
abc Filter...	abc Filter...	abc Filter...	abc Filter...
sellers	seller_id	character varying	NO
sellers	seller_zip_code_prefix	character varying	NO
sellers	seller_city	character varying	NO
sellers	seller_state	character varying	NO





For Products Table:

```
SELECT table_name, column_name, data_type, is_nullable
from INFORMATION_SCHEMA.COLUMNS
where table_catalog = 'target' and table_schema = 'public'
    and table_name = 'products';
```

table_name	column_name	data_type	is_nullable
 Filter...	 Filter...	 Filter...	 Filter...
products	product_id	character varying	NO
products	product_category_name	character varying	YES
products	product_name_lenght	integer	YES
products	product_description_lenght	integer	YES
products	product_photos_qty	integer	YES
products	product_weight_g	integer	YES
products	product_length_cm	integer	YES
products	product_height_cm	integer	YES
products	product_width_cm	integer	YES

For Orders Table:

```
SELECT table_name, column_name, data_type, is_nullable
from INFORMATION_SCHEMA.COLUMNS
where table_catalog = 'target' and table_schema = 'public'
    and table_name = 'orders';
```

table_name	column_name	data_type	is_nullable
 Filter...	 Filter...	 Filter...	 Filter...
orders	order_id	character varying	NO
orders	customer_id	character varying	NO
orders	order_status	USER-DEFINED	NO
orders	order_purchase_timestamp	timestamp without time zone	NO
orders	order_approved_at	timestamp without time zone	YES
orders	order_delivered_carrier_date	timestamp without time zone	YES
orders	order_delivered_customer_...	timestamp without time zone	YES
orders	order_estimated_delivery_d...	timestamp without time zone	YES

For Reviews Table:

```
SELECT table_name, column_name, data_type, is_nullable
from INFORMATION_SCHEMA.COLUMNS
where table_catalog = 'target' and table_schema = 'public'
and table_name = 'reviews';
```

table_name	column_name	data_type	is_nullable
abc Filter...	abc Filter...	abc Filter...	abc Filter...
reviews	review_id	character varying	NO
reviews	order_id	character varying	NO
reviews	review_score	integer	NO
reviews	review_comment_title	character varying	YES
reviews	review_creation_date	timestamp without time zone	NO
reviews	review_answer_timest...	timestamp without time zone	YES

For payments Table:

```
SELECT table_name, column_name, data_type, is_nullable
from INFORMATION_SCHEMA.COLUMNS
where table_catalog = 'target' and table_schema = 'public'
and table_name = 'payments';
```

table_name	column_name	data_type	is_nullable
abc Filter...	abc Filter...	abc Filter...	abc Filter...
payments	order_id	character varying	NO
payments	payment_sequential	integer	NO
payments	payment_type	character varying	NO
payments	payment_installments	integer	NO
payments	payment_value	numeric	NO

For Order Items:

```
SELECT table_name, column_name, data_type, is_nullable
from INFORMATION_SCHEMA.COLUMNS
where table_catalog = 'target' and table_schema = 'public'
and table_name = 'order_items';
```

table_name	column_name	data_type	is_nullable
abc Filter...	abc Filter...	abc Filter...	abc Filter...
order_items	order_id	character varying	NO
order_items	order_item_id	integer	NO
order_items	product_id	character varying	NO
order_items	seller_id	character varying	NO
order_items	shipping_limit_date	timestamp without time zone	NO
order_items	price	numeric	NO
order_items	freight_value	numeric	NO

1.2. Time period for which the data is given:

```
select
min(order_purchase_timestamp) as start_date,
max(order_purchase_timestamp) as end_date
from orders;
```

start_date	end_date
abc Filter...	abc Filter...
2016-09-04 21:15:19	2018-10-17 17:30:18

1.3. Cities and States of customers ordered during the given period:

```
select customer_city, customer_state
from orders o
join customers c using (customer_id)
group by customer_city, customer_state
order by customer_state, customer_city;
```

customer_city	customer_state
abc Filter...	abc Filter...
brasileia	AC
cruzeiro do sul	AC
epitaciolandia	AC
manoel urbano	AC
porto acre	AC
rio branco	AC
senador guiomard	AC
xapuri	AC
agua branca	AL
anadia	AL
arapiraca	AL
atalaia	AL
barra de santo antonio	AL
barra de sao miguel	AL
batalha	AL
belem	AL
boca da mata	AL

And so on.