# atliq_hardware_db

February 6, 2025

```
[1]: %load_ext sql
```

```
[3]: %sql mysql+pymysql://root:techoexpert321!!@localhost:3310/
```

```
[3]: %sql CREATE DATABASE IF NOT EXISTS atliq_hardware_db;
```

```
 * mysql+pymysql://root:***@localhost:3310/
1 rows affected.
```

```
[3]: []
```

```
[4]: %sql SHOW DATABASES;
```

```
 * mysql+pymysql://root:***@localhost:3310/
   mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
25 rows affected.
```

```
[4]: [('atliq_hardware_db',),
     ("b'atliq_hardware_db'",),
     ('ci_testing',),
     ('classicmodels',),
     ('customer_product',),
     ('dannys_dinner',),
     ('demo',),
     ('ecommerce',),
     ('gdb023',),
     ('information_schema',),
     ('international_debt_stats',),
     ('loan',),
     ('meal_planner',),
     ('mysql',),
     ('performance_schema',),
     ('php_testing',),
     ('pizza_db',),
     ('products',),
     ('sakila',),
     ('sample_data',),
     ('spotify_db',),
     ('supermarket_sales',),
```

```
      ('sys',),
      ('task_portal',),
      ('university_db',)]
```

[5]: `%sql mysql+pymysql://root:techoexpert321!!@localhost:3310/atliq_hardware_db`

[6]: `%sql SHOW TABLES;`

```
    mysql+pymysql://root:***@localhost:3310/
 * mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
6 rows affected.
```

[6]: 
```
[('dim_customer',),
 ('dim_product',),
 ('fact_gross_price',),
 ('fact_manufacturing_cost',),
 ('fact_pre_invoice_deductions',),
 ('fact_sales_monthly',)]
```

[13]: `%sql Select * From dim_customer;`

```
    mysql+pymysql://root:***@localhost:3310/
 * mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
209 rows affected.
```

[13]: 
```
[(70002017, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'India', 'India',
 'APAC'),
 (70002018, 'Atliq e Store', 'E-Commerce', 'Direct', 'India', 'India', 'APAC'),
 (70003181, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'Indonesia', 'ROA',
 'APAC'),
 (70003182, 'Atliq e Store', 'E-Commerce', 'Direct', 'Indonesia', 'ROA',
 'APAC'),
 (70004069, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'Japan', 'ROA',
 'APAC'),
 (70004070, 'Atliq e Store', 'E-Commerce', 'Direct', 'Japan', 'ROA', 'APAC'),
 (70005163, 'Atliq e Store', 'E-Commerce', 'Direct', 'Pakistan', 'ROA', 'APAC'),
 (70006157, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'Philiphines', 'ROA',
 'APAC'),
 (70006158, 'Atliq e Store', 'E-Commerce', 'Direct', 'Philiphines', 'ROA',
 'APAC'),
 (70007198, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'South Korea', 'ROA',
 'APAC'),
 (70007199, 'Atliq e Store', 'E-Commerce', 'Direct', 'South Korea', 'ROA',
 'APAC'),
 (70008169, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'Australia', 'ANZ',
 'APAC'),
 (70008170, 'Atliq e Store', 'E-Commerce', 'Direct', 'Australia', 'ANZ',
 'APAC'),
```

```
(70009133, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'Newzealand', 'ANZ',
'APAC'),
(70009134, 'Atliq e Store', 'E-Commerce', 'Direct', 'Newzealand', 'ANZ',
'APAC'),
(70010047, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'Bangladesh', 'ROA',
'APAC'),
(70010048, 'Atliq e Store', 'E-Commerce', 'Direct', 'Bangladesh', 'ROA',
'APAC'),
(70011193, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'France', 'SE',
'EU'),
(70011194, 'Atliq e Store', 'E-Commerce', 'Direct', 'France', 'SE', 'EU'),
(70012042, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'Germany', 'NE',
'EU'),
(70012043, 'Atliq e Store', 'E-Commerce', 'Direct', 'Germany', 'NE', 'EU'),
(70013125, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'Italy', 'SE', 'EU'),
(70013126, 'Atliq e Store', 'E-Commerce', 'Direct', 'Italy', 'SE', 'EU'),
(70014142, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'Netherlands', 'NE',
'EU'),
(70014143, 'Atliq e Store', 'E-Commerce', 'Direct', 'Netherlands', 'NE', 'EU'),
(70015151, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'Norway', 'NE',
'EU'),
(70015152, 'Atliq e Store', 'E-Commerce', 'Direct', 'Norway', 'NE', 'EU'),
(70016177, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'Poland', 'NE',
'EU'),
(70016178, 'Atliq e Store', 'E-Commerce', 'Direct', 'Poland', 'NE', 'EU'),
(70017060, 'Atliq e Store', 'E-Commerce', 'Direct', 'Portugal', 'SE', 'EU'),
(70018115, 'Atliq e Store', 'E-Commerce', 'Direct', 'Spain', 'SE', 'EU'),
(70019204, 'Atliq e Store', 'E-Commerce', 'Direct', 'Sweden', 'NE', 'EU'),
(70020104, 'Atliq e Store', 'E-Commerce', 'Direct', 'Austria', 'NE', 'EU'),
(70021096, 'Atliq e Store', 'E-Commerce', 'Direct', 'United Kingdom', 'NE',
'EU'),
(70022084, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'USA', 'NA', 'NA'),
(70022085, 'Atliq e Store', 'E-Commerce', 'Direct', 'USA', 'NA', 'NA'),
(70023031, 'Atliq Exclusive', 'Brick & Mortar', 'Direct', 'Canada', 'NA',
'NA'),
(70023032, 'Atliq e Store', 'E-Commerce', 'Direct', 'Canada', 'NA', 'NA'),
(70026206, 'Atliq e Store', 'E-Commerce', 'Direct', 'Mexico', 'LATAM',
'LATAM'),
(70027208, 'Atliq e Store', 'E-Commerce', 'Direct', 'Brazil', 'LATAM',
'LATAM'),
(80001019, 'Neptune', 'Brick & Mortar', 'Distributor', 'China', 'ROA', 'APAC'),
(80006154, 'Synthetic', 'Brick & Mortar', 'Distributor', 'Philiphines', 'ROA',
'APAC'),
(80006155, 'Novus', 'Brick & Mortar', 'Distributor', 'Philiphines', 'ROA',
'APAC'),
(80007195, 'Sage', 'Brick & Mortar', 'Distributor', 'South Korea', 'ROA',
'APAC'),
```

```
(80007196, 'Leader', 'Brick & Mortar', 'Distributor', 'South Korea', 'ROA',
'APAC'),
(90001020, 'Zone', 'Brick & Mortar', 'Retailer', 'China', 'ROA', 'APAC'),
(90001021, 'Taobao', 'E-Commerce', 'Retailer', 'China', 'ROA', 'APAC'),
(90002001, 'Reliance Digital', 'Brick & Mortar', 'Retailer', 'India', 'India',
'APAC'),
(90002002, 'Croma', 'Brick & Mortar', 'Retailer', 'India', 'India', 'APAC'),
(90002003, 'Ezone', 'Brick & Mortar', 'Retailer', 'India', 'India', 'APAC'),
(90002004, 'Vijay Sales', 'Brick & Mortar', 'Retailer', 'India', 'India',
'APAC'),
(90002005, 'Lotus', 'Brick & Mortar', 'Retailer', 'India', 'India', 'APAC'),
(90002006, 'Viveks', 'Brick & Mortar', 'Retailer', 'India', 'India', 'APAC'),
(90002007, 'Girias', 'Brick & Mortar', 'Retailer', 'India', 'India', 'APAC'),
(90002008, 'Amazon', 'E-Commerce', 'Retailer', 'India', 'India', 'APAC'),
(90002009, 'Flipkart', 'E-Commerce', 'Retailer', 'India', 'India', 'APAC'),
(90002010, 'Ebay', 'E-Commerce', 'Retailer', 'India', 'India', 'APAC'),
(90002011, 'Atliq Exclusive', 'Brick & Mortar', 'Retailer', 'India', 'India',
'APAC'),
(90002012, 'Electricalsocity', 'Brick & Mortar', 'Retailer', 'India', 'India',
'APAC'),
(90002013, 'Electricalslytical', 'Brick & Mortar', 'Retailer', 'India',
'India', 'APAC'),
(90002014, 'Expression', 'Brick & Mortar', 'Retailer', 'India', 'India',
'APAC'),
(90002015, 'Propel', 'Brick & Mortar', 'Retailer', 'India', 'India', 'APAC'),
(90002016, 'Amazon ', 'E-Commerce', 'Retailer', 'India', 'India', 'APAC'),
(90003179, 'Acclaimed Stores', 'Brick & Mortar', 'Retailer', 'Indonesia',
'ROA', 'APAC'),
(90003180, 'Amazon ', 'E-Commerce', 'Retailer', 'Indonesia', 'ROA', 'APAC'),
(90004061, 'Info Stores', 'Brick & Mortar', 'Retailer', 'Japan', 'ROA',
'APAC'),
(90004062, 'Flawless Stores', 'Brick & Mortar', 'Retailer', 'Japan', 'ROA',
'APAC'),
(90004063, 'Electricalsbea Stores', 'Brick & Mortar', 'Retailer', 'Japan',
'ROA', 'APAC'),
(90004064, 'All-Out', 'Brick & Mortar', 'Retailer', 'Japan', 'ROA', 'APAC'),
(90004065, 'Neptune', 'Brick & Mortar', 'Retailer', 'Japan', 'ROA', 'APAC'),
(90004066, 'Surface Stores', 'Brick & Mortar', 'Retailer', 'Japan', 'ROA',
'APAC'),
(90004067, 'Amazon', 'E-Commerce', 'Retailer', 'Japan', 'ROA', 'APAC'),
(90004068, 'Amazon ', 'E-Commerce', 'Retailer', 'Japan', 'ROA', 'APAC'),
(90005159, 'Expression', 'Brick & Mortar', 'Retailer', 'Pakistan', 'ROA',
'APAC'),
(90005160, 'Nomad Stores', 'Brick & Mortar', 'Retailer', 'Pakistan', 'ROA',
'APAC'),
(90005161, 'Zone', 'Brick & Mortar', 'Retailer', 'Pakistan', 'ROA', 'APAC'),
(90005162, 'Amazon ', 'E-Commerce', 'Retailer', 'Pakistan', 'ROA', 'APAC'),
```

```
(90006153, 'Insight', 'Brick & Mortar', 'Retailer', 'Philiphines', 'ROA',
'APAC'),
(90006156, 'Amazon ', 'E-Commerce', 'Retailer', 'Philiphines', 'ROA', 'APAC'),
(90007197, 'Amazon ', 'E-Commerce', 'Retailer', 'South Korea', 'ROA', 'APAC'),
(90008164, 'Digimarket', 'Brick & Mortar', 'Retailer', 'Australia', 'ANZ',
'APAC'),
(90008165, 'Forward Stores', 'Brick & Mortar', 'Retailer', 'Australia', 'ANZ',
'APAC'),
(90008166, 'Sound', 'Brick & Mortar', 'Retailer', 'Australia', 'ANZ', 'APAC'),
(90008167, 'Electricalsocity', 'Brick & Mortar', 'Retailer', 'Australia',
'ANZ', 'APAC'),
(90008168, 'Amazon ', 'E-Commerce', 'Retailer', 'Australia', 'ANZ', 'APAC'),
(90009127, 'Epic Stores', 'Brick & Mortar', 'Retailer', 'Newzealand', 'ANZ',
'APAC'),
(90009128, 'Propel', 'Brick & Mortar', 'Retailer', 'Newzealand', 'ANZ',
'APAC'),
(90009129, 'Leader', 'Brick & Mortar', 'Retailer', 'Newzealand', 'ANZ',
'APAC'),
(90009130, 'Logic Stores', 'Brick & Mortar', 'Retailer', 'Newzealand', 'ANZ',
'APAC'),
(90009131, 'Path', 'Brick & Mortar', 'Retailer', 'Newzealand', 'ANZ', 'APAC'),
(90009132, 'Amazon ', 'E-Commerce', 'Retailer', 'Newzealand', 'ANZ', 'APAC'),
(90010044, 'Surface Stores', 'Brick & Mortar', 'Retailer', 'Bangladesh', 'ROA',
'APAC'),
(90010045, 'Control', 'Brick & Mortar', 'Retailer', 'Bangladesh', 'ROA',
'APAC'),
(90010046, 'Amazon ', 'E-Commerce', 'Retailer', 'Bangladesh', 'ROA', 'APAC'),
(90011185, 'Epic Stores', 'Brick & Mortar', 'Retailer', 'France', 'SE', 'EU'),
(90011186, 'Elite', 'Brick & Mortar', 'Retailer', 'France', 'SE', 'EU'),
(90011187, 'Chip 7', 'Brick & Mortar', 'Retailer', 'France', 'SE', 'EU'),
(90011188, 'Elkjøp', 'Brick & Mortar', 'Retailer', 'France', 'SE', 'EU'),
(90011189, 'UniEuro', 'Brick & Mortar', 'Retailer', 'France', 'SE', 'EU'),
(90011190, 'Media Markt', 'Brick & Mortar', 'Retailer', 'France', 'SE', 'EU'),
(90011191, 'Sorefoz', 'Brick & Mortar', 'Retailer', 'France', 'SE', 'EU'),
(90011192, 'Amazon ', 'E-Commerce', 'Retailer', 'France', 'SE', 'EU'),
(90012033, 'Digimarket', 'Brick & Mortar', 'Retailer', 'Germany', 'NE', 'EU'),
(90012034, 'Otto', 'Brick & Mortar', 'Retailer', 'Germany', 'NE', 'EU'),
(90012035, 'Notebillig', 'Brick & Mortar', 'Retailer', 'Germany', 'NE', 'EU'),
(90012036, 'Billa', 'Brick & Mortar', 'Retailer', 'Germany', 'NE', 'EU'),
(90012037, 'Saturn', 'Brick & Mortar', 'Retailer', 'Germany', 'NE', 'EU'),
(90012038, 'Expert', 'Brick & Mortar', 'Retailer', 'Germany', 'NE', 'EU'),
(90012039, 'Currys (Dixons Carphone)', 'Brick & Mortar', 'Retailer', 'Germany',
'NE', 'EU'),
(90012040, 'Fnac-Darty', 'Brick & Mortar', 'Retailer', 'Germany', 'NE', 'EU'),
(90012041, 'Amazon ', 'E-Commerce', 'Retailer', 'Germany', 'NE', 'EU'),
(90013116, 'Unity Stores', 'Brick & Mortar', 'Retailer', 'Italy', 'SE', 'EU'),
(90013117, 'Euronics', 'Brick & Mortar', 'Retailer', 'Italy', 'SE', 'EU'),
```

```
(90013118, 'Fnac-Darty', 'Brick & Mortar', 'Retailer', 'Italy', 'SE', 'EU'),
(90013119, "Argos (Sainsbury's)", 'Brick & Mortar', 'Retailer', 'Italy', 'SE',
'EU'),
(90013120, 'Coolblue', 'Brick & Mortar', 'Retailer', 'Italy', 'SE', 'EU'),
(90013121, 'Boulanger', 'Brick & Mortar', 'Retailer', 'Italy', 'SE', 'EU'),
(90013122, 'Radio Popular', 'Brick & Mortar', 'Retailer', 'Italy', 'SE', 'EU'),
(90013123, 'Expert', 'Brick & Mortar', 'Retailer', 'Italy', 'SE', 'EU'),
(90013124, 'Amazon ', 'E-Commerce', 'Retailer', 'Italy', 'SE', 'EU'),
(90014135, 'Electricalslance Stores', 'Brick & Mortar', 'Retailer',
'Netherlands', 'NE', 'EU'),
(90014136, 'Reliance Digital', 'Brick & Mortar', 'Retailer', 'Netherlands',
'NE', 'EU'),
(90014137, 'Media Markt', 'Brick & Mortar', 'Retailer', 'Netherlands', 'NE',
'EU'),
(90014138, 'Mbit', 'Brick & Mortar', 'Retailer', 'Netherlands', 'NE', 'EU'),
(90014139, 'Elkjøp', 'Brick & Mortar', 'Retailer', 'Netherlands', 'NE', 'EU'),
(90014140, 'Radio Popular', 'Brick & Mortar', 'Retailer', 'Netherlands', 'NE',
'EU'),
(90014141, 'Amazon ', 'E-Commerce', 'Retailer', 'Netherlands', 'NE', 'EU'),
(90015144, 'Sound', 'Brick & Mortar', 'Retailer', 'Norway', 'NE', 'EU'),
(90015145, 'Synthetic', 'Brick & Mortar', 'Retailer', 'Norway', 'NE', 'EU'),
(90015146, 'Mbit', 'Brick & Mortar', 'Retailer', 'Norway', 'NE', 'EU'),
(90015147, 'Chiptec', 'Brick & Mortar', 'Retailer', 'Norway', 'NE', 'EU'),
(90015148, 'Boulanger', 'Brick & Mortar', 'Retailer', 'Norway', 'NE', 'EU'),
(90015149, 'UniEuro', 'Brick & Mortar', 'Retailer', 'Norway', 'NE', 'EU'),
(90015150, 'Amazon ', 'E-Commerce', 'Retailer', 'Norway', 'NE', 'EU'),
(90016171, 'Electricalsara Stores', 'Brick & Mortar', 'Retailer', 'Poland',
'NE', 'EU'),
(90016172, 'Power', 'Brick & Mortar', 'Retailer', 'Poland', 'NE', 'EU'),
(90016173, 'Expert', 'Brick & Mortar', 'Retailer', 'Poland', 'NE', 'EU'),
(90016174, 'Currys (Dixons Carphone)', 'Brick & Mortar', 'Retailer', 'Poland',
'NE', 'EU'),
(90016175, "Argos (Sainsbury's)", 'Brick & Mortar', 'Retailer', 'Poland', 'NE',
'EU'),
(90016176, 'Amazon ', 'E-Commerce', 'Retailer', 'Poland', 'NE', 'EU'),
(90017049, 'Premium Stores', 'Brick & Mortar', 'Retailer', 'Portugal', 'SE',
'EU'),
(90017050, 'Electricalsara Stores', 'Brick & Mortar', 'Retailer', 'Portugal',
'SE', 'EU'),
(90017051, 'Forward Stores', 'Brick & Mortar', 'Retailer', 'Portugal', 'SE',
'EU'),
(90017052, 'Power', 'Brick & Mortar', 'Retailer', 'Portugal', 'SE', 'EU'),
(90017053, 'Info Stores', 'Brick & Mortar', 'Retailer', 'Portugal', 'SE',
'EU'),
(90017054, 'Flawless Stores', 'Brick & Mortar', 'Retailer', 'Portugal', 'SE',
'EU'),
(90017055, 'Electricalslance Stores', 'Brick & Mortar', 'Retailer', 'Portugal',
```

```
'SE', 'EU'),
 (90017056, 'Sorefoz', 'Brick & Mortar', 'Retailer', 'Portugal', 'SE', 'EU'),
 (90017057, 'Euronics', 'Brick & Mortar', 'Retailer', 'Portugal', 'SE', 'EU'),
 (90017058, 'Mbit', 'Brick & Mortar', 'Retailer', 'Portugal', 'SE', 'EU'),
 (90017059, 'Amazon ', 'E-Commerce', 'Retailer', 'Portugal', 'SE', 'EU'),
 (90018105, 'Integration Stores', 'Brick & Mortar', 'Retailer', 'Spain', 'SE',
'EU'),
 (90018106, 'Flipkart', 'E-Commerce', 'Retailer', 'Spain', 'SE', 'EU'),
 (90018107, 'Elite', 'Brick & Mortar', 'Retailer', 'Spain', 'SE', 'EU'),
 (90018108, 'Relief', 'Brick & Mortar', 'Retailer', 'Spain', 'SE', 'EU'),
 (90018109, 'Chiptec', 'Brick & Mortar', 'Retailer', 'Spain', 'SE', 'EU'),
 (90018110, 'Boulanger', 'Brick & Mortar', 'Retailer', 'Spain', 'SE', 'EU'),
 (90018111, 'Media Markt', 'Brick & Mortar', 'Retailer', 'Spain', 'SE', 'EU'),
 (90018112, 'Euronics', 'Brick & Mortar', 'Retailer', 'Spain', 'SE', 'EU'),
 (90018113, 'Elkjøp', 'Brick & Mortar', 'Retailer', 'Spain', 'SE', 'EU'),
 (90018114, 'Amazon ', 'E-Commerce', 'Retailer', 'Spain', 'SE', 'EU'),
 (90019200, 'Sorefoz', 'Brick & Mortar', 'Retailer', 'Sweden', 'NE', 'EU'),
 (90019201, 'Expert', 'Brick & Mortar', 'Retailer', 'Sweden', 'NE', 'EU'),
 (90019202, "Argos (Sainsbury's)", 'Brick & Mortar', 'Retailer', 'Sweden', 'NE',
'EU'),
 (90019203, 'Amazon ', 'E-Commerce', 'Retailer', 'Sweden', 'NE', 'EU'),
 (90020097, 'Atlas Stores', 'Brick & Mortar', 'Retailer', 'Austria', 'NE',
'EU'),
 (90020098, 'Electricalsquipo Stores', 'Brick & Mortar', 'Retailer', 'Austria',
'NE', 'EU'),
 (90020099, 'Integration Stores', 'Brick & Mortar', 'Retailer', 'Austria', 'NE',
'EU'),
 (90020100, 'Nova', 'Brick & Mortar', 'Retailer', 'Austria', 'NE', 'EU'),
 (90020101, 'Euronics', 'Brick & Mortar', 'Retailer', 'Austria', 'NE', 'EU'),
 (90020102, 'Fnac-Darty', 'Brick & Mortar', 'Retailer', 'Austria', 'NE', 'EU'),
 (90020103, 'Amazon ', 'E-Commerce', 'Retailer', 'Austria', 'NE', 'EU'),
 (90021086, 'Electricalsquipo Stores', 'Brick & Mortar', 'Retailer', 'United
Kingdom', 'NE', 'EU'),
 (90021087, 'Logic Stores', 'Brick & Mortar', 'Retailer', 'United Kingdom',
'NE', 'EU'),
 (90021088, 'Electricalslytical', 'Brick & Mortar', 'Retailer', 'United
Kingdom', 'NE', 'EU'),
 (90021089, 'Atlas Stores', 'Brick & Mortar', 'Retailer', 'United Kingdom',
'NE', 'EU'),
 (90021090, 'Radio Popular', 'Brick & Mortar', 'Retailer', 'United Kingdom',
'NE', 'EU'),
 (90021091, 'Expert', 'Brick & Mortar', 'Retailer', 'United Kingdom', 'NE',
'EU'),
 (90021092, 'UniEuro', 'Brick & Mortar', 'Retailer', 'United Kingdom', 'NE',
'EU'),
 (90021093, 'Chip 7', 'Brick & Mortar', 'Retailer', 'United Kingdom', 'NE',
'EU'),
```

```
 (90021094, 'Coolblue', 'Brick & Mortar', 'Retailer', 'United Kingdom', 'NE',
'EU'),
 (90021095, 'Amazon ', 'E-Commerce', 'Retailer', 'United Kingdom', 'NE', 'EU'),
 (90022071, 'Acclaimed Stores', 'Brick & Mortar', 'Retailer', 'USA', 'NA',
'NA'),
 (90022072, 'Path', 'Brick & Mortar', 'Retailer', 'USA', 'NA', 'NA'),
 (90022073, 'Control', 'Brick & Mortar', 'Retailer', 'USA', 'NA', 'NA'),
 (90022074, 'Flipkart', 'E-Commerce', 'Retailer', 'USA', 'NA', 'NA'),
 (90022075, 'BestBuy', 'Brick & Mortar', 'Retailer', 'USA', 'NA', 'NA'),
 (90022076, 'Circuit City', 'Brick & Mortar', 'Retailer', 'USA', 'NA', 'NA'),
 (90022077, 'Radio Shack', 'Brick & Mortar', 'Retailer', 'USA', 'NA', 'NA'),
 (90022078, 'Costco', 'Brick & Mortar', 'Retailer', 'USA', 'NA', 'NA'),
 (90022079, 'walmart', 'Brick & Mortar', 'Retailer', 'USA', 'NA', 'NA'),
 (90022080, 'Staples', 'Brick & Mortar', 'Retailer', 'USA', 'NA', 'NA'),
 (90022081, 'Amazon', 'E-Commerce', 'Retailer', 'USA', 'NA', 'NA'),
 (90022082, 'Amazon ', 'E-Commerce', 'Retailer', 'USA', 'NA', 'NA'),
 (90022083, 'Ebay', 'E-Commerce', 'Retailer', 'USA', 'NA', 'NA'),
 (90023022, 'Nomad Stores', 'Brick & Mortar', 'Retailer', 'Canada', 'NA', 'NA'),
 (90023023, 'Amazon', 'E-Commerce', 'Retailer', 'Canada', 'NA', 'NA'),
 (90023024, 'Sage', 'Brick & Mortar', 'Retailer', 'Canada', 'NA', 'NA'),
 (90023025, 'Premium Stores', 'Brick & Mortar', 'Retailer', 'Canada', 'NA',
'NA'),
 (90023026, 'Relief', 'Brick & Mortar', 'Retailer', 'Canada', 'NA', 'NA'),
 (90023027, 'Costco', 'Brick & Mortar', 'Retailer', 'Canada', 'NA', 'NA'),
 (90023028, 'walmart', 'Brick & Mortar', 'Retailer', 'Canada', 'NA', 'NA'),
 (90023029, 'Staples', 'Brick & Mortar', 'Retailer', 'Canada', 'NA', 'NA'),
 (90023030, 'Amazon ', 'E-Commerce', 'Retailer', 'Canada', 'NA', 'NA'),
 (90024183, 'Electricalsbea Stores', 'Brick & Mortar', 'Retailer', 'Chile',
'LATAM', 'LATAM'),
 (90024184, 'Amazon ', 'E-Commerce', 'Retailer', 'Chile', 'LATAM', 'LATAM'),
 (90025209, 'Electricalsbea Stores', 'Brick & Mortar', 'Retailer', 'Columbia',
'LATAM', 'LATAM'),
 (90026205, 'Amazon ', 'E-Commerce', 'Retailer', 'Mexico', 'LATAM', 'LATAM'),
 (90027207, 'Amazon ', 'E-Commerce', 'Retailer', 'Brazil', 'LATAM', 'LATAM')]
```

### 0.0.1   1) Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.

```
[23]: %%sql
Select distinct(market) as Market From dim_customer Where customer = "Atliq␣
 ↪Exclusive" AND region = "APAC"
```

```
  mysql+pymysql://root:***@localhost:3310/
 * mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
8 rows affected.
```

```
[23]: [('India',),
       ('Indonesia',),
       ('Japan',),
       ('Philiphines',),
       ('South Korea',),
       ('Australia',),
       ('Newzealand',),
       ('Bangladesh',)]
```

### 0.0.2 2) What is the percentage of unique product increase in 2021 vs. 2020? The final output contains these fields, unique_products_2020 unique_products_2021 percentage_chg

```
[29]: %%sql
with cte as(
select
     count(distinct(case when fiscal_year=2020 then product_code end)) as␣
  ↪unique_products_2020,
   count(distinct(case when fiscal_year=2021 then product_code end)) as␣
  ↪unique_products_2021
from fact_sales_monthly)

select unique_products_2020, unique_products_2021,␣
  ↪concat(round(((unique_products_2021 - unique_products_2020) /
  ↪unique_products_2020)*100,2),'%') as percentage_chg from cte;s
```

     mysql+pymysql://root:***@localhost:3310/
    * mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
    1 rows affected.

```
[29]: [(245, 334, '36.33%')]
```

### 0.0.3 3) Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields, segment product_count

```
[35]: %%sql
Select segment, count(product_code) as product_count From dim_product Group By␣
  ↪segment Order By count(product_code) Desc
```

     mysql+pymysql://root:***@localhost:3310/
    * mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
    6 rows affected.

```
[35]: [('Notebook', 129),
       ('Accessories', 116),
       ('Peripherals', 84),
       ('Desktop', 32),
```

```
        ('Storage', 27),
        ('Networking', 9)]
```

#### 0.0.4  4) Follow-up: Which segment had the most increase in unique products in 2021 vs 2020? The final output contains these fields, segment product_count_2020 product_count_2021 difference

```
[36]: %%sql
with cte as
(
select
        d.segment,
        count(distinct(case when fs.fiscal_year=2020 then d.product_code end))␣
    ↪as product_count_2020,
        count(distinct(case when fs.fiscal_year=2021 then d.product_code end))␣
    ↪as product_count_2021
from dim_product d
join fact_sales_monthly fs on d.product_code=fs.product_code
group by d.segment
)
select
        segment,
        product_count_2020,
        product_count_2021,
        (product_count_2021-product_count_2020) as difference
from cte
order by difference desc;
```

```
 mysql+pymysql://root:***@localhost:3310/
* mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
6 rows affected.
```

```
[36]: [('Accessories', 69, 103, 34),
       ('Notebook', 92, 108, 16),
       ('Peripherals', 59, 75, 16),
       ('Desktop', 7, 22, 15),
       ('Storage', 12, 17, 5),
       ('Networking', 6, 9, 3)]
```

#### 0.0.5  5) Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields product_code product manufacturing_cost

```
[43]: %%sql
select fm.product_code, d.product, round(fm.manufacturing_cost,2) as␣
  ↪manufacturing_cost from fact_manufacturing_cost fm
join dim_product as d on fm.product_code = d.product_code
```

```
where manufacturing_cost = (select min(manufacturing_cost) from␣
  ↪fact_manufacturing_cost) or
    manufacturing_cost = (select max(manufacturing_cost) from␣
  ↪fact_manufacturing_cost);
```

```
   mysql+pymysql://root:***@localhost:3310/
 * mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
2 rows affected.
```

[43]: `[('A2118150101', 'AQ Master wired x1 Ms', Decimal('0.89')),`
`('A6120110206', 'AQ HOME Allin1 Gen 2', Decimal('240.54'))]`

**0.0.6  6) Generate a report which contains the top 5 customers who received an average high pre_invoice_discount_pct for the fiscal year 2021 and in the Indian market. The final output contains these fields, customer_code customer average_discount_percentage**

[45]: 
```
%%sql
select f.customer_code, c.customer, avg(pre_invoice_discount_pct) as average␣
  ↪From fact_pre_invoice_deductions f
join dim_customer c On f.customer_code = c.customer_code
Where fiscal_year = 2021 AND c.market='India' Group By f.customer_code, c.
  ↪customer Order By average Desc Limit 5;
```

```
   mysql+pymysql://root:***@localhost:3310/
 * mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
5 rows affected.
```

[45]: `[(90002009, 'Flipkart', Decimal('0.30830000')),`
`(90002006, 'Viveks', Decimal('0.30380000')),`
`(90002003, 'Ezone', Decimal('0.30280000')),`
`(90002002, 'Croma', Decimal('0.30250000')),`
`(90002016, 'Amazon ', Decimal('0.29330000'))]`

**0.0.7  7) Get the complete report of the Gross sales amount for the customer "Atliq Exclusive" for each month. This analysis helps to get an idea of low and high-performing months and take strategic decisions. The final report contains these columns: Month Year Gross sales Amount**

[46]: 
```
%%sql
Select year(f.date) as Years, Monthname(f.date) as Months,
concat(round(sum(f.sold_quantity*p.gross_price)/1000000,2),'m') as 'Gross sales␣
  ↪Amount'
From fact_sales_monthly f
join fact_gross_price p on f.product_code = p.product_code
join dim_customer c on f.customer_code = c.customer_code
Where c.customer = "Atliq Exclusive"
Group By Months, Years;
```

11

```
      mysql+pymysql://root:***@localhost:3310/
     * mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
    24 rows affected.
```

[46]: [(2019, 'September', '9.09m'),
       (2019, 'October', '10.38m'),
       (2019, 'November', '15.23m'),
       (2019, 'December', '9.76m'),
       (2020, 'January', '9.58m'),
       (2020, 'February', '8.08m'),
       (2020, 'March', '0.77m'),
       (2020, 'April', '0.80m'),
       (2020, 'May', '1.59m'),
       (2020, 'June', '3.43m'),
       (2020, 'July', '5.15m'),
       (2020, 'August', '5.64m'),
       (2020, 'September', '19.53m'),
       (2020, 'October', '21.02m'),
       (2020, 'November', '32.25m'),
       (2020, 'December', '20.41m'),
       (2021, 'January', '19.57m'),
       (2021, 'February', '15.99m'),
       (2021, 'March', '19.15m'),
       (2021, 'April', '11.48m'),
       (2021, 'May', '19.20m'),
       (2021, 'June', '15.46m'),
       (2021, 'July', '19.04m'),
       (2021, 'August', '11.32m')]

### 0.0.8  8) In which quarter of 2020, got the maximum total_sold_quantity?  The final output contains these fields sorted by the total_sold_quantity, Quarter total_sold_quantity

[47]: 
```sql
%%sql
SELECT
    CONCAT('Q', QUARTER(date)) AS Quarter,
    SUM(sold_quantity) AS total_sold_quantity
FROM fact_sales_monthly
WHERE YEAR(date) = 2020
GROUP BY Quarter
ORDER BY total_sold_quantity DESC;
```

```
      mysql+pymysql://root:***@localhost:3310/
     * mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
    4 rows affected.
```

[47]: [('Q4', Decimal('17447125')),
       ('Q3', Decimal('7137551')),

```
('Q1', Decimal('3704398')),
('Q2', Decimal('3395899'))]
```

### 0.0.9  9) Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution? The final output contains these fields, channel gross_sales_mln percentage

```
[50]: %%sql
with cte as
 (
    select
            c.channel,
            sum(p.gross_price*f.sold_quantity)/1000000 as gross_sales_mln
    from fact_sales_monthly f
    inner join fact_gross_price p on f.product_code=p.product_code
    inner join dim_customer c on f.customer_code=c.customer_code
    where f.fiscal_year=2021
    group by channel
 ) ,
cte2 as
 (
    select
            sum(p.gross_price*f.sold_quantity)/1000000 as total
 from fact_sales_monthly f
    inner join fact_gross_price p on f.product_code=p.product_code
 inner join dim_customer c on f.customer_code=c.customer_code
    where f.fiscal_year=2021
 )
select
      cte.channel,
      round(cte.gross_sales_mln,2) as gross_sales_mln,
      concat(round((cte.gross_sales_mln/cte2.total)*100,2),'%') as percentage
from cte
cross join cte2
order by percentage desc;
```

     mysql+pymysql://root:***@localhost:3310/
     * mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
    3 rows affected.

```
[50]: [('Retailer', Decimal('1924.17'), '73.22%'),
     ('Direct', Decimal('406.69'), '15.47%'),
     ('Distributor', Decimal('297.18'), '11.31%')]
```

### 0.0.10  10) Get the Top 3 products in each division that have a high to-tal_sold_quantity in the fiscal_year 2021? The final output contains these fields, division product_code product total_sold_quantity rank_order

```sql
%%sql
with cte as(
Select p.division, p.product_code, p.product, sum(sold_quantity) as
 ↪total_sold_quantity,
dense_rank() OVER (partition by p.division order by sum(s.sold_quantity) Desc)
 ↪as rank_order
From dim_product p join fact_sales_monthly s on p.product_code = s.product_code
where s.fiscal_year=2021
group by  p.division, p.product_code, p.product)

Select * From cte Where rank_order <4;
```

```
   mysql+pymysql://root:***@localhost:3310/
 * mysql+pymysql://root:***@localhost:3310/atliq_hardware_db
9 rows affected.
```

[51]: 
```
[('N & S', 'A6720160103', 'AQ Pen Drive 2 IN 1', Decimal('701373'), 1),
 ('N & S', 'A6818160202', 'AQ Pen Drive DRC', Decimal('688003'), 2),
 ('N & S', 'A6819160203', 'AQ Pen Drive DRC', Decimal('676245'), 3),
 ('P & A', 'A2319150302', 'AQ Gamers Ms', Decimal('428498'), 1),
 ('P & A', 'A2520150501', 'AQ Maxima Ms', Decimal('419865'), 2),
 ('P & A', 'A2520150504', 'AQ Maxima Ms', Decimal('419471'), 3),
 ('PC', 'A4218110202', 'AQ Digit', Decimal('17434'), 1),
 ('PC', 'A4319110306', 'AQ Velocity', Decimal('17280'), 2),
 ('PC', 'A4218110208', 'AQ Digit', Decimal('17275'), 3)]
```

[3]: 
```
!pandoc --version
```

```
pandoc 3.6.2
Features: +server +lua
Scripting engine: Lua 5.4
User data directory: C:\Users\prian\AppData\Roaming\pandoc
Copyright (C) 2006-2024 John MacFarlane. Web: https://pandoc.org
This is free software; see the source for copying conditions. There is no
warranty, not even for merchantability or fitness for a particular purpose.
```

[2]: 
```python
import os
os.environ['PATH'] = r'C:\Program Files\Pandoc;' + os.environ['PATH']
```

[ ]: