```
Slide 2
//Summary key metrics//
SELECT
  COUNT(*) AS total_cards,
  COUNT(DISTINCT client_id) AS total_clients,
  COUNTIF(has_chip = TRUE) AS cards_with_chip,
  COUNTIF(has_chip = FALSE) AS cards_without_chip,
  COUNTIF(card_on_dark_web = TRUE) AS cards_exposed,
  AVG(credit_limit) AS avg_credit_limit
FROM `erudite-mote-469600-f2.mandirisekuritas.cards`;


Slide 3
//Distribusi Kartu by Brand//
SELECT
  card_brand,
  COUNT(*) AS total_cards
FROM `erudite-mote-469600-f2.mandirisekuritas.cards`
GROUP BY card_brand
ORDER BY total_cards DESC;

Slide 4
//Total card by chip//
SELECT
  has_chip,
  COUNT(*) AS total_cards
FROM `erudite-mote-469600-f2.mandirisekuritas.cards`
GROUP BY has_chip;

//Rata-rata card by darkweb//
SELECT
  COUNTIF(card_on_dark_web = TRUE) AS cards_exposed,
  COUNT(*) AS total_cards,
  SAFE_DIVIDE(COUNTIF(card_on_dark_web = TRUE), COUNT(*)) * 100 AS pct_exposed
FROM `erudite-mote-469600-f2.mandirisekuritas.cards`;


//Rata-rata pergantian pin by chip & credit limit//
SELECT
  client_id,
  card_brand,
```

```sql
  card_type,
  credit_limit,
  has_chip,
  card_on_dark_web,
  year_pin_last_changed
FROM `erudite-mote-469600-f2.mandirisekuritas.cards`
WHERE card_on_dark_web = TRUE
   OR has_chip = FALSE
   OR year_pin_last_changed < 2020;
```

Slide 5
```sql
//Trend pembukaan kartu by bulan//
SELECT
  SUBSTR(acct_open_date, 1, 4) AS open_year,
  COUNT(*) AS cards_issued
FROM `erudite-mote-469600-f2.mandirisekuritas.cards`
GROUP BY open_year
ORDER BY open_year;
```

```sql
//Total card by pergantian pin over time//
SELECT
  year_pin_last_changed,
  COUNT(*) AS total_cards
FROM `erudite-mote-469600-f2.mandirisekuritas.cards`
GROUP BY year_pin_last_changed
ORDER BY year_pin_last_changed DESC;
```

Slide 6
```sql
//Distribusi total limit by users//
WITH limits AS (
  SELECT
    client_id,
    credit_limit,
    NTILE(10) OVER (ORDER BY credit_limit) AS decile
  FROM `erudite-mote-469600-f2.mandirisekuritas.cards`
)
SELECT
  decile,
  COUNT(*) AS total_cards,
  COUNT(DISTINCT client_id) AS total_users,
```

```sql
  MIN(credit_limit) AS min_limit,
  MAX(credit_limit) AS max_limit,
  AVG(credit_limit) AS avg_limit
FROM limits
GROUP BY decile
ORDER BY decile;


//Top client by total limit//
SELECT
  client_id,
  SUM(credit_limit) AS total_limit,
  COUNT(*) AS num_cards
FROM `erudite-mote-469600-f2.mandirisekuritas.cards`
GROUP BY client_id
ORDER BY total_limit DESC
LIMIT 10;


Slide 7
//Total users by group age//
SELECT
  APPROX_QUANTILES(current_age, 10) AS deciles_age
FROM `erudite-mote-469600-f2.mandirisekuritas.users`;


//Gender distribution//
SELECT
  gender,
  COUNT(*) AS total
FROM `erudite-mote-469600-f2.mandirisekuritas.users`
GROUP BY gender;

//users by group//
-- Distribusi umur + jumlah user per kelompok umur
SELECT
  CASE
    WHEN current_age BETWEEN 20 AND 29 THEN '20s'
    WHEN current_age BETWEEN 30 AND 39 THEN '30s'
    WHEN current_age BETWEEN 40 AND 49 THEN '40s'
    WHEN current_age BETWEEN 50 AND 59 THEN '50s'
```

```sql
    ELSE '60+'
  END AS age_group,
  COUNT(*) AS total_users
FROM `erudite-mote-469600-f2.mandirisekuritas.users`
GROUP BY age_group
ORDER BY age_group;
```

Slide 8
```sql
//Top income per region//
SELECT
  address,
  AVG(yearly_income) AS avg_income
FROM `erudite-mote-469600-f2.mandirisekuritas.users`
GROUP BY address
ORDER BY avg_income DESC
LIMIT 10;
```

```sql
//Top DTI per region//
SELECT
  address,
  AVG(SAFE_DIVIDE(total_debt, yearly_income)) AS avg_dti
FROM `erudite-mote-469600-f2.mandirisekuritas.users`
GROUP BY address
ORDER BY avg_dti DESC
LIMIT 10;
```

Slide 9
```sql
//DTI tinggi & credit score rendah//
SELECT
  id,
  yearly_income,
  total_debt,
  credit_score,
  SAFE_DIVIDE(total_debt, yearly_income) AS dti
FROM `erudite-mote-469600-f2.mandirisekuritas.users`
WHERE credit_score < 500
  AND SAFE_DIVIDE(total_debt, yearly_income) > 1
ORDER BY dti DESC
```

```sql
LIMIT 20;


//user korelasi//
-- Korelasi DTI dengan usia dan skor kredit
SELECT
  CORR(SAFE_DIVIDE(total_debt, yearly_income), current_age) AS corr_dti_age,
  CORR(SAFE_DIVIDE(total_debt, yearly_income), credit_score) AS corr_dti_credit_score
FROM `erudite-mote-469600-f2.mandirisekuritas.users`
WHERE yearly_income > 0;
```