```sql
--Preview

SELECT * FROM `Diabetes_data.diabetes`

--CLEANING: Searching for missing entries

SELECT *

FROM `Diabetes_data.diabetes`

WHERE diabetes IS NULL; --Going thorugh all the columns, NO NULL values found

--CLEANING: checking for Duplicates

SELECT * FROM `Diabetes_data.diabetes` -- A total of 100,000 results shown.

----

SELECT DISTINCT *

FROM `Diabetes_data.diabetes` -- A total of 96146 results found which are unique.

--CLEANING: Deleting Duplicate values

DELETE FROM `Diabetes_data.diabetes`

WHERE

    IN (

    SELECT gender, age, hypertension, heart_disease, smoking_history, bmi,
HbA1c_level, blood_glucose_level, diabetes

    FROM `Diabetes_data.diabetes`

    GROUP BY gender, age, hypertension, heart_disease, smoking_history, bmi,
HbA1c_level, blood_glucose_level, diabetes

    HAVING COUNT(*) > 1

)

--CLEANING: Data Type convering

SELECT

gender,

CAST(age AS INT64) AS Age, -- FLOAT to INT

CAST(hypertension AS BOOL) AS Hypertensive, -- INT to T/F

CAST(heart_disease AS BOOL) AS Heartdisease, -- INT to T/F

smoking_history AS Smoking,

bmi AS BMI,

HbA1c_level AS A1c,

blood_glucose_level AS Glucose_level,

CAST(diabetes AS BOOL) AS Diabetic
```

```sql
FROM `Diabetes_data.diabetes`
-- INSIGHTS from the Data
-- Checking AVG<MIN<MAX values
SELECT
AVG(blood_glucose_level) AS Avg_glucose_level, --138 value
MIN(blood_glucose_level) AS Min_glucose_level, --80 value
MAX(blood_glucose_level) AS Max_glucose_level, --300 value
AVG(bmi) AS Avg_bmi, -- 27.3 value
MIN(bmi) AS Min_bmi, --10 value
MAX(bmi) AS Max_bmi --95.7 value
FROM `Diabetes_data.diabetes`
-- Count for male Diabetics Patients with high Glucose and bmi
SELECT *
FROM `Diabetes_data.diabetes`
WHERE gender = 'Male' and blood_glucose_level > 120 and bmi > 25 --21775 results found
--Count for Female Diabetics patients with high Glucose and bmi
SELECT *
FROM `Diabetes_data.diabetes`
WHERE gender = 'Female'and blood_glucose_level > 120 and bmi > 25 -- 28527
Female_pateints
--Count of Male who have Diabetes
SELECT COUNT(gender)
FROM `Diabetes_data.diabetes`
WHERE gender = 'Male' and diabetes = 1 -- 4039 result found
--Count of Female who have Diabetes
SELECT COUNT(gender)
FROM `Diabetes_data.diabetes`
WHERE gender = 'Female' and diabetes = 1 -- 4461 results found
--MIN & MAX age of Diabetics Patients
SELECT
MIN(age) AS Min_age,
MAX(age) AS Max_age
FROM `Diabetes_data.diabetes`
```

```sql
WHERE diabetes = 1 -- Min_age = 3, Max_age = 80
--MIN & MAX age of Heart_disease
SELECT
MIN(age) AS Min_age,
MAX(age) AS Max_age
FROM `Diabetes_data.diabetes`
WHERE heart_disease = 1 -- Min_age = 2, Max_age = 80
--MIN & MAX age of HbA1c_level
SELECT
MIN(age) AS Min_age,
MAX(age) AS Max_age
FROM `Diabetes_data.diabetes`
WHERE HbA1c_level > 6.5 -- Min_age = 2, Max_age = 80
--MIN & MAX age of Hypertension
SELECT
MIN(age) AS Min_age,
MAX(age) AS Max_age
FROM `Diabetes_data.diabetes`
WHERE hypertension = 1 -- Min_age = 4, Max_age = 80
--Checking and Saving Uniqe values
SELECT
  DISTINCT *
FROM `Diabetes_data.diabetes` -- 96146 entries found.
```