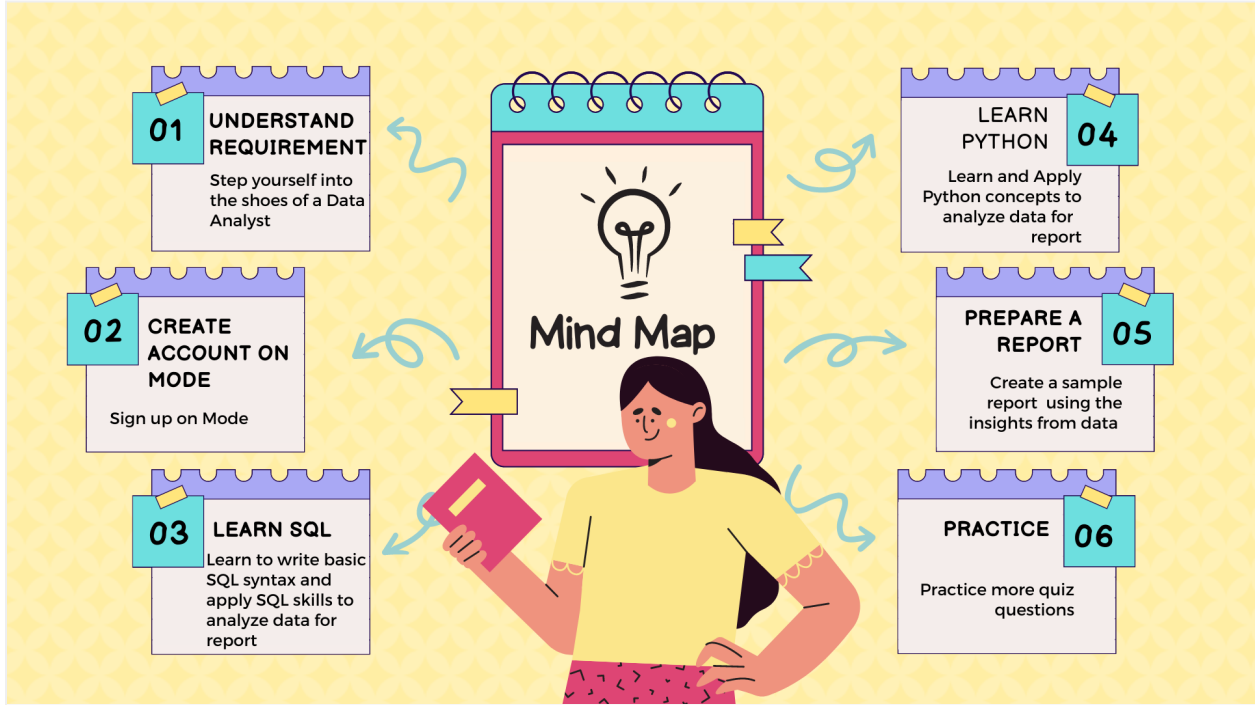


# Introduction to the Gender Case Study

Welcome to the Gender Case Study!  
Here is a preview of the structure of the course:



Teleport yourself into the shoes of a Chief Data Analyst working for an international development organization. The organization has prioritized focusing on gender-related issues and aims to work on the United Nations’ Sustainable Development Goal of Gender Equality <sup>[1]</sup>. One of the key challenges currently is the lack of in-depth analysis of international gender statistics. This organization works with countries globally and aims to provide an in-depth analysis of gender statistics to policymakers of different countries. This will enable policymakers to make data-driven policies and prioritize gender development projects.

## Objective:

You have been assigned the responsibility of preparing a report for this organization. This will help the organization understand the development indicators with a gender lens, focus its efforts to improve the metrics that need immediate attention, identify gaps with a gender lens, and build inclusive data-driven policies for equitable growth.

*Note: The focus of this case study is to get you acquainted with data analysis through a gender lens using coding languages. Please feel free to refer to the coding solutions when needed, and you are not expected to solve all questions.*



## Report Structure:

The report should be prepared to study various development indicators across all countries of the world through a gender lens. It should cover the following areas of interest:

### 1. Understanding Demographics Indicators



#### 1.1. Analyze the trend for the total female population per year

- 1.2. Analyze the trend for the female population as a percentage of the total population
- 1.3. Find the countries with the highest percentage of female population ratio in 2020
- 1.4. Find the country with the highest sex ratio at birth in 2020

## 2. Education



- 2.1. Find the countries with the lowest adult female literacy rate in a given year
- 2.2. Find the change in adult female literacy rate for a country over a period of time
- 2.3. Find the trend for the percentage of Female Children out of primary school out of overall children out of primary school in a given country

## 3. Health



- 3.1. Find the best/worst countries based on the female and male life expectancy among a group of countries in a given year
- 3.2. Compare the female and male Under-5 mortality rates in a given year for a group of countries
- 3.3. Find the countries that had the highest prevalence of HIV among females in the age group 15-24 in a given year

#### 4. Labor



Analyze how the percentage of female employment has changed in each sector over a period of time

- 4.1. The percentage of females employed in agriculture
- 4.2. The percentage of females employed in the Industry sector
- 4.3. The percentage of females employed in the Services sector

#### 5. Finance



- 5.1. How has female debit card ownership changed over a period of time
- 5.2. Find the five countries with the lowest female debit card ownership in a given year

## 6. Other Indicators



- 6.1. Analyze how the Human Capital Index for females has changed for a country over a period of time
- 6.2. Find the best 5 countries based on the Human Capital Index (HCI) for females in a given year
- 6.3. Find the worst 5 countries based on the Human Capital Index (HCI) for females in a given year
- 6.4. Find the number of countries where a woman cannot get a job the same way a man can
- 6.5. List all countries where a woman can open a bank account the same way as a man

### Let's get started!

The case study is designed to help you prepare the report that serves the objective. The case study has 20 questions you need to answer to prepare the report.

You will learn to extract information from the dataset using Data Science programming languages - SQL and Python. In the following files, you will see coding solutions in both SQL and Python to help you answer the questions.

### Understanding the dataset

The dataset has national-level statistics for more than 190 countries from 2012-2020 at an annual level. It has information with a gender lens about 74 indicators across 6 categories. [Here](#) is a sample of how the data would look like. The sample has only 100 rows. However, the full dataset has around ~64,000 rows.

You can find the list of all indicators [here](#).

→ ***You can now move to setup your Mode Account***