Problem Description - I

NITI Aayog: Background

[NITI Aayog](https://en.wikipedia.org/wiki/NITI_Aayog) (National Institution for Transforming India) is a policy think tank of the Government of India; it provides strategic inputs to the central and the state governments to achieve various development goals. In the past, NITI Aayog has played an important role in initiatives such as Digital India, Atal Innovation Mission and various agricultural reforms and have designed various policies in education, skill development, water management, healthcare, etc.

NITI Aayog was established to replace the [Planning Commission of India](https://en.wikipedia.org/wiki/Planning_Commission_(India)), which used to follow a top-down model for policy making, i.e., it typically designed policies at the central level (such as the [5-year plans](https://en.wikipedia.org/wiki/Five-Year_Plans_of_India)). On the other hand, NITI Aayog designs policies specific to the different states or segments of the economy.

Finance Minister, [Arun Jaitley](https://en.wikipedia.org/wiki/Arun_Jaitley), made the following observation on the necessity of creating NITI Aayog, "The 65-year-old Planning Commission had become a redundant organisation. It was relevant in a command economy structure, but not any longer. India is a diversified country and its states are in various phases of economic development along with their own strengths and weaknesses. In this context, a ‘one size fits all’ approach to economic planning is obsolete...".

Project Brief

You are working as the chief data scientist at NITI Aayog, reporting to the CEO. The CEO has initiated a project wherein the NITI Aayog will provide top-level recommendations to the Chief Ministers (CMs) of various states, which will help them prioritise areas of development for their respective states. Since different states are in different phases of development, the recommendations should be specific to the states.

The overall goal of this project is to help the CMs focus on areas that will foster economic development for their respective states. Since the most common measure of economic development is the [GDP](https://en.wikipedia.org/wiki/Gross_domestic_product), you will analyse the GDP of the various states of India and suggest ways to improve it.

Understanding GDP

[Gross domestic product (GDP)](https://en.wikipedia.org/wiki/Gross_domestic_product) at current prices is the GDP at the market value of goods and services produced in a country during a year. In other words, GDP measures the 'monetary value of final goods and services produced by a country/state in a given period of time'.

GDP can be broadly divided into goods and services produced by three sectors: the primary sector (agriculture), the secondary sector (industry), and the tertiary sector (services).

It is also known as nominal GDP. More technically, (real) GDP takes into account the price change that may have occurred due to inflation. This means that the real GDP is nominal GDP adjusted for inflation. We will use the nominal GDP for this exercise. Also, we will consider the financial year 2015-16 as the base year, as most of the data required for this exercise is available for the aforementioned period.

Per Capita GDP and Income

Total GDP divided by the population gives the per capita GDP, which roughly measures the average value of goods and services produced per person. The per capita income is closely related to the per capita GDP (though they are not the same). In general, the per capita income increases when the per capita GDP increases, and vice-versa. For instance, in the financial year 2015-16, the per capita income of India was ₹93,293, whereas the per capita GDP of India was $1717, which roughly amounts to ₹1,11,605.

India ranks 11th in the world in terms of total GDP; however, it lies at the 139th position in terms of per capita GDP.