**Power BI Task**

**Objective**

The goal of this task is to assess your ability to use Power BI to clean, analyze, and visualize educational course data. You will work with the provided CSV file containing information on colleges, universities, courses, and their characteristics across districts and talukas.

**Data Source**

You will be using the following dataset:

* **File Name**: DA Batch 10 Data set.csv

This dataset contains information such as:

* District, Taluka
* College Name, College Type, University
* Course Name, Course Type, Duration, Aided/Unaided
* Course Category, Professional/Non-Professional Indicator

**Task**

**1. Connect to the Data**

* Open **Power BI Desktop**
* Select **“Get Data” → “Text/CSV”** to import the provided dataset
* Load the data into Power BI and review it

**2. Clean & Prepare the Data**

Perform the following actions:

* Remove or fill missing values in College Type
* Rename columns to remove spaces (e.g., Course\_Name, Course\_Duration\_Months)
* Create a new column Specialization by extracting the portion after the hyphen in Course Name
* Create a column Duration Category:
  + Short (<12 months)
  + Medium (12–36 months)
  + Long (>36 months)

**3. Create Visualizations**

Design a dashboard containing the following visuals:

**a. KPI Cards**

* Total Number of Colleges
* Total Unique Courses
* % of Professional Courses
* Average Course Duration

**b. Bar Charts**

* Number of Courses by Course Category
* Colleges Count by District
* Top 10 Colleges by Course Count

**c. Pie/Donut Charts**

* Distribution of Aided vs Unaided Courses
* UG vs PG Course Distribution

**d. Line or Area Chart**

* Average Course Duration by District or Category

**e. Map Visual**

* College Count by District (use filled map or region map)

**f. Matrix/Table**

* University vs Course Type with Average Duration

**4. Add Interactivity**

Include:

* **Slicers** to filter by:
  + Course Category
  + College Type
  + Course Type
  + Professional/Non-Professional
* Ensure all visuals are **cross-filtered** interactively

**5. Report Page (Q&A)**

Create a report page that visually answers the following questions:

* Which district has the most colleges?
* What are the most common course categories?
* Which universities offer the widest range of course types?
* Are unaided courses more common in professional or non-professional programs?
* Which college has the longest average course duration?
* What is the top specialization in the state?

**Guidance**

**Connecting to Data**

* If unfamiliar with importing CSVs, follow Power BI tutorials on loading flat files
* Clean column names using **Transform Data → Power Query Editor**

**Creating Visuals**

* Use the **Fields pane** to drag fields into visuals
* Explore formatting options to enhance visuals
* Use the **“Extract Text After Delimiter”** function in Power Query for specialization

**Adding Interactivity**

* Use **Slicers** from the Visualizations pane
* Enable **Cross-filter** in Format → Edit Interactions

**Design Tips**

* Keep layout clean and logical
* Use consistent font styles and readable sizes
* Highlight key figures using cards and colors

**Expected Deliverables**

1. A .pbix file with a complete Power BI dashboard
2. A 1-page summary/report answering the key questions with screenshots