Project Idea 1: Store Sales Dataset Analysis

Week 1: Data Cleaning and Preprocessing

- **Tasks:**
  - **Data Preprocessing:** Clean and preprocess the data using Power BI.
  - **Tools:** Power BI.
- **Deliverables:**
  - Cleaned dataset ready for analysis.
  - Data preprocessing notebook.

Week 2: Analysis Questions Phase

- **Tasks:**
  - **Determine Data Analysis Questions:** Determine all possible analysis questions that can be deducted from the given dataset and would be of interest to the organization's decision makers, e.g., what is the impact on products category and regions on sales performance?
  - **Tools:** Power BI.
- **Deliverables:**
  - Set of analysis questions that can be answered via the dataset.

Week 3: Dashboard Phase

- **Tasks:**
  - **Build Dashboard:** Build a Power BI dashboard that visualize the answers to the asked questions.
  - **Tools:** Power BI.
- **Deliverables:**
  - Power BI dashboard.

Week 4: Final Presentation

- **Tasks:**
  - **Final Presentation:** Prepare a report and presentation summarizing the project work, including data analysis, model development, and deployment.
- **Deliverables:**
  - Final report and presentation.

Project Idea 2: Supply Chain Dataset Analysis

Week 1: Data Cleaning and Preprocessing

- **Tasks:**
  - **Data Preprocessing:** Clean and preprocess the data using Power BI.
  - **Tools:** Power BI.
- **Deliverables:**
  - Cleaned dataset ready for analysis.
  - Data preprocessing notebook.

Week 2: Analysis Questions Phase

- **Tasks:**
  - **Determine Data Analysis Questions:** Determine all possible analysis questions that can be deducted from the given dataset and would be of interest to the organization's decision makers, e.g., what is the impact of product category on the revenue?
  - **Tools:** Power BI.
- **Deliverables:**
  - Set of analysis questions that can be answered via the dataset.

Week 3: Dashboard Phase

- **Tasks:**
  - **Build Dashboard:** Build a Power BI dashboard that visualize the answers to the asked questions.
  - **Tools:** Power BI.
- **Deliverables:**
  - Power BI dashboard.

Week 4: Final Presentation

- **Tasks:**
  - **Final Presentation:** Prepare a report and presentation summarizing the project work, including data analysis, model development, and deployment.
- **Deliverables:**
  - Final report and presentation.

Project Idea 3: Human Resources Dataset Analysis

Week 1: Data Cleaning and Preprocessing

- **Tasks:**
  - **Data Preprocessing:** Clean and preprocess the data using Power BI.
  - **Tools:** Power BI.
- **Deliverables:**
  - Cleaned dataset ready for analysis.
  - Data preprocessing notebook.

Week 2: Analysis Questions Phase

- **Tasks:**
  - **Determine Data Analysis Questions:** Determine all possible analysis questions that can be deducted from the given dataset and would be of interest to the organization's decision makers, e.g., what is the relation between the employees ages and their satisfaction level?
  - **Tools:** Power BI.
- **Deliverables:**
  - Set of analysis questions that can be answered via the dataset.

Week 3: Dashboard Phase

- **Tasks:**
  - **Build Dashboard:** Build a Power BI dashboard that visualize the answers to the asked questions.
  - **Tools:** Power BI.
- **Deliverables:**
  - Power BI dashboard.

Week 4: Final Presentation

- **Tasks:**
  - **Final Presentation:** Prepare a report and presentation summarizing the project work, including data analysis, model development, and deployment.
- **Deliverables:**
  - Final report and presentation.

Project Idea 4 (Outstanding): Manufacturing Downtime

Week 1: Data Cleaning and Preprocessing

- **Tasks:**
  - **Data Preprocessing:** Clean and preprocess the data using Power BI.
  - **Tools:** Power BI.
- **Deliverables:**
  - Cleaned dataset ready for analysis.
  - Data preprocessing notebook.

Week 2: Analysis Questions Phase

- **Tasks:**
  - **Determine Data Analysis Questions:** Determine all possible analysis questions that can be deducted from the given dataset and would be of interest to the organization's decision makers.
  - Predict downtime in the next day of operation. Then, accordingly, highlighting the number of batches to be produced.
  - **Tools:** Power BI.
- **Deliverables:**
  - Set of analysis questions that can be answered via the dataset.

Week 3: Dashboard Phase

- **Tasks:**
  - **Build Dashboard:** Build a Power BI dashboard that visualize the answers to the asked questions.
  - **Tools:** Power BI.
- **Deliverables:**
  - Power BI dashboard.

Week 4: Final Presentation

- **Tasks:**
  - **Final Presentation:** Prepare a report and presentation summarizing the project work, including data analysis, model development, and deployment.
- **Deliverables:**
  - Final report and presentation.

Project Idea 5 (Outstanding): MTA Daily Ridership

Week 1: Data Cleaning and Preprocessing

- **Tasks:**
  - **Data Preprocessing:** Clean and preprocess the data using Power BI.
  - **Tools:** Power BI.
- **Deliverables:**
  - Cleaned dataset ready for analysis.
  - Data preprocessing notebook.

Week 2: Analysis Questions Phase

- **Tasks:**
  - **Determine Data Analysis Questions:** Determine all possible analysis questions that can be deducted from the given dataset and would be of interest to the organization's decision makers.
  - Predict amount of ridership for the next month.
  - **Tools:** Power BI.
- **Deliverables:**
  - Set of analysis questions that can be answered via the dataset.

Week 3: Dashboard Phase

- **Tasks:**
  - **Build Dashboard:** Build a Power BI dashboard that visualize the answers to the asked questions.
  - **Tools:** Power BI.
- **Deliverables:**
  - Power BI dashboard.

Week 4: Final Presentation

- **Tasks:**
  - **Final Presentation:** Prepare a report and presentation summarizing the project work, including data analysis, model development, and deployment.
- **Deliverables:**
  - Final report and presentation.

Project Idea 6 (Outstanding): UK Train Rides

Week 1: Data Cleaning and Preprocessing

- **Tasks:**
  - **Data Preprocessing:** Clean and preprocess the data using Power BI.
  - **Tools:** Power BI.
- **Deliverables:**
  - Cleaned dataset ready for analysis.
  - Data preprocessing notebook.

Week 2: Analysis Questions Phase

- **Tasks:**
  - **Determine Data Analysis Questions:** Determine all possible analysis questions that can be deducted from the given dataset and would be of interest to the organization's decision makers.
  - Predict number of rides for the next month. Then, accordingly, highlighting the forecasted revenue during each day of the next month. Also, you need to specify the demand on different ticket classes.
  - **Tools:** Power BI.
- **Deliverables:**
  - Set of analysis questions that can be answered via the dataset.

Week 3: Dashboard Phase

- **Tasks:**
  - **Build Dashboard:** Build a Power BI dashboard that visualize the answers to the asked questions.
  - **Tools:** Power BI.
- **Deliverables:**
  - Power BI dashboard.

Week 4: Final Presentation

- **Tasks:**
  - **Final Presentation:** Prepare a report and presentation summarizing the project work, including data analysis, model development, and deployment.
- **Deliverables:**
  - Final report and presentation.