

GET 211.1 PROJECT ANALYSIS

1. What is this project about?

You are asked to analyze crude petroleum export data for a specific continent over 25 years (1996–2021) using Python.

After analyzing the data, you will summarize your findings in a PowerPoint presentation (maximum 7 slides).

2. What we were given

- A large dataset (spreadsheet file)
- The dataset contains crude petroleum export values (called Trade Valuation)
- The data covers 25 years
- Each group works on one continent only

3. Task 1: Data Analysis (Using Python)

You will use Python (with Pandas or NumPy) to calculate some basic statistics from the Trade Valuation column.

In simple terms, you need to find:

- Mean → the average export value
- Standard Deviation → how much the values vary or spread out
- Minimum → the smallest export value
- Maximum → the largest export value
- Range → difference between maximum and minimum

Range = Maximum - Minimum

N/B: You are not expected to write complex code; just simple Pandas/NumPy commands.

4. Task 2: Range Problem

This means you must use the range you calculated to answer a question, for example:

- How wide is the variation in crude oil export values over 25 years?
- Did exports fluctuate a lot or stay relatively stable?

In short:

Use the range value to explain export volatility or stability.

5. Task 3: PowerPoint Presentation (Max. 7 Slides)

You must create a short and clear PowerPoint summarizing your work.

Suggested Slide Breakdown (7 slides)

1. Title / Introduction

- Project title
- Continent analyzed
- Time period (1996–2021)

2. Introduction

- Brief explanation of crude petroleum exports
- Purpose of the analysis

3. Methodology

- Dataset used
- Python tools (Pandas / NumPy)
- Statistical methods applied

4. Results

- Mean, standard deviation, min, max, range
- Table or bullet points

5. Visualization (Optional but Recommended)

- Line chart or bar chart showing exports over time

6. Discussion

- What do the results mean?
- Was export value stable or volatile?
- Any noticeable trends?

7. Conclusion & References

- Key findings summarized
- Reference to data source (if any)

6. Presentation Details (Important)

- **Submission:** Slides must be submitted before the presentation date
- **Presentation Dates:**
 - i. 11-03-2026 → Stream II (EDS)
 - ii. 18-03-2026 → Stream I (Mechatronic Hall)
 - **Time:** 8–10 am
 - **Alternate Venue:** Bonny Auditorium, NLNG Centre

7. Key Things to Remember

- Keep everything **simple and clear**
- Use **basic Python commands**
- Do **not exceed 7 slides**
- Focus on **explaining results**, not just numbers

SOURCE: MTE DOCS