**I. Data Gathering**

a. Go to: https://factpages.npd.no/Default.aspx?culture=en&nav1=field&nav2=TableView|Production|Saleable|Monthly

b. Create a scrip to download the data or download it manually

Deliverables:

- Script used to download data (if applicable)

- Raw data (one file in csv or xlsx format)

Please note that we would prefer using Python for this step. However, usage of other programming languages will be scored equally. The objective is to minimize manual work and to create a robust process that can be executed on a regular basis. Completing this step manually will result in a score of zero for this step. This step is meant to test technical skills. However, being practical is key here, so keep it simple.

**II. Data Processing**

a. Load the data downloaded in the previous step

b. Keep the first four columns: [‘Field (Discovery)’, ‘Year’, ‘Month’, ‘Net - oil [mill Sm3]’], drop the other columns

c. Keep production data for EKOFISK, ELDFISK, EMBLA from January 2013 onwards, delete all other rows

d. Convert production data to thousand barrel per day using <https://www.npd.no/en/about-us/information-services/conversion-table/>

e. For each year/month, sum up the production data for the three fields and assign the name “Greater Ekofisk Area” to the time series f. Create a ‘date’ column based on the given year/month combinations (year = 2013, month = 1 -> 01/01/2013)

g. Create the output table having the columns: project (step e.), date (step f.), production (step d.)

Please note that we would prefer using Python for this step. However, usage of other programming languages will be scored equally. The objective is to minimize manual work and to create a robust process that can be executed on a regular basis. Completing this step with Excel will result in a maximum score of 50% for this step. This step is meant to test technical skills. However, being practical is key here, so keep it simple.

Deliverable: - Script or spreadsheet used for this step - Output data (one file in csv or xlsx format having the columns: project, date, production)

**III. Analysis, Synthesis and Forecasting**

Use the historical production data from the previous step and all other information you can find online to create a production forecast until December 2023.

Please consider this step to be an ad hoc exercise in the context of this assignment. The objective of this step is to test primarily analytical skills (instead of technical skills). Thus, the usage of Excel will be scored equally to using Python or any other programming language. However, please make sure to keep all calculations straightforward and reproducible. Also, efficiency and time management is important here. Please continue with the next step once you have figured out the key points. Hint: we are after seasonal fluctuations of supply and the underlying reason for it.

Deliverable: - Script or spreadsheet used for this step - List of sources used with source name, short summary of key information, link - Output data (one file in csv or xlsx format having the columns: project, date, production)

Please compress all files in a ZIP file with clear naming and send as an attachement by 12:00 Monday.