Assignment Instructions

Loading Data:

- Write a Python script to load a CSV file named UserDetails.csv from a folder and create a DataFrame from it. Show the first few rows of the DataFrame.

Adding Department Codes:

- Create a new column called d_code in the DataFrame with a default value of 11. Then, write code that updates d_code based on department names. List all department codes here:
    - Quality: 33
    - Finance: 44
    - Human Resources: 66
    - Information Technology: 77
    - Marketing: 88
    - Operations: 99

Assigning Gender Codes:

- Add a new column called g_code. Write a loop to go through each row and give a unique code for 'Male' starting from 3030 and for 'Female' starting from 4039, increasing the codes by 2 for each person.
    - Note: Females must use even numbers, and males must use odd numbers.

Processing Dates of Birth:

- Change the date_of_birth column to a datetime format. Create another column called b_code that shows the date of birth in the format yyMMdd.

Creating Identification Number:

- Write code to create a new column called Nombor Kad Pengenalan that combines b_code, d_code, and g_code in this format: b_code-d_code-g_code.

Saving the Data:

- Make a new DataFrame that includes userid, firstname, lastname, date_of_birth, gender, dept, and Nombor Kad Pengenalan. Then, save this DataFrame to a new CSV file called UserDetailsWithICNumber.csv.

Complete Script:

- Combine all the steps above into one complete Python script that loads user data, processes it, creates identification numbers, and saves the final data to a new CSV file.

Submission:

- Please submit the assignment before **30 Oct 2024** by uploading/posting it to the Team channel.