Instructions:

Please read the instructions very carefully.

1. This is an **INDIVIDUAL WORK** unless specified otheriwse. Students are not allowed to share their answers (actual coding) but are allowed to discuss with each other to solve the problems.

2. The tasks will be checked during the practical session itself therefore students will be assessed based on participation and their answers.

3. To start:

    a. Create a new folder called **StudentID-P1**. Please change student id to your own personal ID and change the 1 to the correct practical number.

    b. Create one .ipynb / .py file for each question with the naming convention question1.ipynb, question2.ipynb and so on.

    c. The following information must be included in each file:
        i. Student Name
        ii. Student ID
        iii. Module Code and Title

4. Please note that **ALL FILE AND NAMING CONVENTIONS** must be followed.

5. The **GREEN** colored font in the sample output represents an input from the user.

6. The **BLUE** colored font in the sample output represents a dynamic output.

7. Please note that the colored fonts will vary on the values specified. In other words, they are just **SAMPLES** only.

8. All tasks must be completed within the session. Students are given enough time to complete the tasks listed.

9. Once completed, please create a zip file with the same name as your folder, and upload it to LMS before the end of the session. A submission link will be provided.

10. Students are encouraged to upload their work to their own GitHub account. Students are also encouraged to include the GitHub link in the submission.

11. Students are encouraged to ask questions during the practical if they encountered a problem.

Question 1:

Using the employee's dataset, generate the following:

a) Select 4 rows of data at random with replacement
b) Select 4 rows of data at random without replacement

Sample Output:

a) Select 4 rows of data at random with replacement

No.	First Name	Gender	Start Date	Last Login Time	Salary	Bonus %	Senior Management	Team
9	Angela	Female	11/22/2005	6:29 AM	95570	18.523	True	Engineering
6	Dennis	Male	4/18/1987	1:35 AM	115163	10.125	False	Legal
1	Douglas	Male	8/6/1993	12:42 PM	97308	6.945	True	Marketing
9	Angela	Female	11/22/2005	6:29 AM	95570	18.523	True	Engineering

b) Select 4 rows of data at random without replacement

No.	First Name	Gender	Start Date	Last Login Time	Salary	Bonus %	Senior Management	Team
3	Maria	Female	4/23/1993	11:17 AM	130590	11.858	False	Finance
6	Dennis	Male	4/18/1987	1:35 AM	115163	10.125	False	Legal
7	Ruby	Female	8/17/1987	4:20 PM	65476	10.012	True	Product
1	Douglas	Male	8/6/1993	12:42 PM	97308	6.945	True	Marketing

Question 2:

Import text file called text file. Using the data from the textfile, implement the following functions:

a) Check whether a given string is in the contains 9-digit number.
b) Check whether a given string is starts with letter ‘a’ and ends with letter ‘b’.
c) Split string by given delimiter

Sample Output:

a) CheckNum(“123456789”)
True

CheckNum(“123man”)
False

b) CheckAB(“Absorb”)
True

CheckAB(“Apple”)
False

c) SplitDelimiter(“My#Name”, “#”)
[My, Name]

SplitDelimiter(“My#Name”, “,”)
[My#Name]

SplitDelimiter(“My$Name”, “$”)
[My, Name]

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