**FINAL PROJECT WORK FOR 3MTT DATA SCIENCE**

INSTRUCTIONS:

1. YOU SHOULD ONLY SUBMIT THE JUPYTER NOTEBOOK SHOWING ALL THE OUTPUTS

Question 1:

You are given a task in a SAIL Innovation Lab to keep collect some inputs and create a record. You are to generate a record of individual first-timers from the input of First name, Surname, Town, Date of Birth (month/day/year) and give the output in the following format in csv:

[Date, Serial Number, First name, Surname, Age, class group, Birthday (Days, Month)]

Generate any random details of 7 potential Applicants. The birthday should be in the form (17, June) for example. The age can be calculated by subtracting the date of birth from current date (datetime.now()) in days and dividing it by 365 and then convert it to an integer. More on how to do this in this YouTube link:

<https://www.youtube.com/watch?v=RjMbCUpvIgw>

You will no assign each of the applicants into their respect class group based on age group ( 9 – 14(STEM CAFE) and 16 and above (Data Science).

Read the file and print the contents in a well formatted form as shown in class

Question 2:

You are given the Temperature of major cities in the world in Celsius as shown below:

1. Berlin, 29

2. Cairo, 36

3. Buenos Aires, 19

4. Los Angeles, 26

5. Tokyo, 27

6. New York, 28

7. London, 22

Write a single function that accepts the serial number, city and temperature and another function convert it convert it to Fahrenheit using the formulae: F = 9/5\*C + 32 where C is the degree in Celsius and F is the output in Fahrenheit.

The output will be in the form: [Serial number, City, Temp (Fahrenheit)] and should be in a csv file

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Question 3:

Imagine that you have a younger brother that was given a quadratic equation assignment and was asked to calculate the value of X1 and X2 for any given value of a, b and c.

Write a function to accept values of a, b and c and generate the output in the format: [S/No, a, b, c, equation, X1, X2] e.g [1, 1, 5, 6, 1x^2 + 5x + 6, -2, -3] and should be in a csv file.

The header should be [S/No, a, b, c, equation, X1, X2]

Use the programme to solve the following assignment:

1. 1,-16,48

2. 2,7,-9

3. 1,0.9,-0.36

4. -3,0,243

5.2,-11,14

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