Practical 1 (due 2022-03-25 @ 09:00)

The purpose of this assignment is for you to get comfortable with basic data types and C++ expressions.

The following table displays the rainfall (in mm) for Utopia for that past year.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
83	12	33	49	76	52	58	21	86	9	38	86

Millimetre can be converted to inches by multiplying millimetre with the following conversion factor: **0.03937007874**

Instructions:

Write a C++ application that complies with the following instructions.

1. Each month's rainfall must be stored in integer (int) variables. You can hard code the values into the program.
2. Each month's name must be stored as a constant string-type variables.
3. Calculate the average rainfall using a C++ expression and store the result in a double variable.
4. Create a const variable to store the conversion factor from mm to inches.
5. Convert and store the average rainfall from mm to inches.
6. Output the annual rainfall table in a user-friendly way onto the terminal.
7. Output the average rainfall in mm.
8. Output the average rainfall in inches.

Upload and submission

- Create an empty PDF document and call it **Design.pdf**
- When your program is working and you have created the empty Design.pdf file you must add your work to an archive file in the **zip** compression format. The name of the archive must be in the following format

  `SURNAME_INITIALS_STUDENTNUMBER_SUBJECT_YEAR_P0.zip`

  e.g. for a student called Anne Student with student number 1234567

  `STUDENT_A_1234567_CSC01A1_2022_P0.zip`
- The archive must contain the following directories / folders
  - **Source** - containing the source code needed to compile your program (`main.cpp`)
  - **Bin** – Please use something like CodeBlocks to generate an executable from your source code and store this in the Bin folder.
  - **Docs** – *Normally would contain your design but may contain an **empty document** this week as the design process has not yet been covered.*

Mark sheet		
	Code compiles	10
	Constant conversion declaration	10
	Month names stored as twelve string variables	10
	Rainfall stored as twelve integer variables	10
	Calculate average mm	20
	Convert average mm into inches	10
	Output rainfall table	10
	Output average rainfall in both mm and inches	10
	Archive file successfully created with all the folders	10
	Total	/100