Practical 1 (due 2023-02-24 @ 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 distance (in km) travelled by a self-driving car in the past week.

Mon	Tue	Wed	Thu	Fri	Sat	Sun
83	12	33	49	76	52	58

Kilometres can be converted to miles by multiplying kilometres with the following conversion factor: **0.621371**.

Instructions:

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

1. Each day's distance travelled must be stored in integer (int) variables. You can hardcode the values into the program.
2. Each day must be stored as a constant string-type variable.
3. Calculate the average distance using a C++ expression and store the result in a double variable.
4. Create a const variable to store the conversion factor from km to miles.
5. Convert and store the average distance from km to miles.
6. Output the weekly distance travelled table in a user-friendly way onto the terminal.
7. Output the average distance in km.
8. Output the average distance in miles.

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`)
  - **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
	Days stored as seven string variables	10
	Distance is stored as seven integer variables	10
	Calculate average km	20
	Convert average km into miles	10
	Output distance travelled table	10
	Output average distance in both km and miles	10
	Archive file is successfully created with all the folders	10
	Total	/100