Exercise 7

Implementing Classes 1: Day of the Week

Introduction:

When the code base of problem will go in size so will its complexity. But when we think of the entire program as single entity, composed of autonomous sub-entities then we can simplify its complexity. In computer science, abstracting information for the perusal of the user is the first step in describing the features of a program. The class in C++ is the means in which the abstraction can be translated into a user-defined type.

For this exercise, the you would implement the days of the week problem

Learning Outcomes:

- Create a class for a days of the week with the appropriate member variables and functions.
- Implement and tests the functions that are in the class by creating and instance of the class (object).

Problem background

1. Create a project file for this exercise.
2. On a header file, `day.h`, create a class named `dayType` with the private variables indicated as follows:
   ```
   string day;
   ```

3. In your class, write the function prototypes as public functions indicated below

```
dayType();     //default constructor, set day to Sunday
void setDay (string); //set day of the week
string getDay (); //return day
string getNextDay();// get next day
string getPrevDay();//get previous day
void printDay();//print the item of current day
string calcAddDay(int);//calculate the day when added with a certain
integer number of days, e.g. Sunday added by 3 will return Wednesday.
~dayType(); //default destructor
```

4. On another `dayTypeImp.cpp`, implement the function body for the class `dayType`.
5. Test the operation of these function on `main.cpp` function `main()`.
6. Compress your project before submitting it to VSUEE.