Computer Science

FACULTY OF ENGINEERING, LTH

Exercise 1

About	Files	Solutions
Basic C++: implement a class, allocate objects, write a function.	exercise1.tar.gz	sol-exercise1.tar.gz

1. A class Date describes a date with year, month, and day. Your task is to implement the member functions, one of the constructors and a function to compute the number of days between two dates. The constructor that creates a Date object representing the current date is already implemented (read about the C functions for date and time handling in the man pages for localtime, if you're interested). You may ignore leap years in the next() function, if you wish.

Files: *date.h*, *date.cc* (to be completed by you), *datetest.cc* (test program).

Compile, link and execute with the commands:

```
make datetest
./datetest
```

The command make without an argument builds (compiles and links) all the programs in this exercise.

2. The class Point describes a point in the plane. The program *pointtest.cc* allocates a point object in different ways. Study the program and make sure that you understand the different alternatives.

3. Study the program *sizetest.cc*. Try to predict the output from the program, then run the program and check your prediction.

4. A palindrome is a word that reads the same both forwards and backwards. Examples: anna, amanaplanacanalpanama. Write a function that takes a string as parameter and returns true if the word is a palindrome, false otherwise. Also write a program that reads words from the terminal and checks whether they are palindromes. Modify the makefile to build the program.

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