1. Time class (40 Points)

Create a Time class. It should have fields for hours, minutes and seconds. It should overload add (+) operator. The add (+) operator should return a new Time object which holds the result of the addition. The file 'Time.cpp' provides a basic test. The expected output is:

4 hours, 35 minutes, 38 seconds

5 hours, 56 minutes, 8 seconds

11 hours, 52 minutes, 16 seconds

2. (60 Points) In this problem, you will learn how to handle mouse and keyboard input in Qt.

Task 1: Key and mouse input example

Download the zip folder "KeyPressMouseExample.zip" and extract its content. Next open Qt Creator and load the KeyPressMouseExample.pro. Study mainwindow.h and mainwindow.cpp. Try to change the code and see the changes by running the project.

Task 2: Connect your tetrahedron

Add the following functionalities to your previous lab's tetrahedron (or cube) project:

- **1.** Make your tetrahedron (cube) move along the x-y plane when the user presses up-down and left-right buttons.
- **2.** Make your tetrahedron (cube) rotate around the y axis when pressing 'A' and 'D', around x axis when pressing 'W' and 'S', and around z axis when pressing 'Q' and 'E'.
- **3.** Make your tetrahedron move along the x-y plane, when we drag it by mouse

Instruction for submission:

- 1. Create folder for each solution and Zip all your folder together
- 2. Submit the zip folder to catcourses