# Object-oriented Programming in C++

## Practical Worksheet 6

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### Questions

*(Questions marked * need to be submitted to the NOW dropbox.)*

*(Make a Visual Studio solution file by creating a new Visual Studio project for the first question. Add .cpp files, etc. Add further Visual Studio projects to this solution for each question.)*

**LECTURE 6**

38. Modify your Car class from question 29 (or, better, question 31) so that it is a base class for inherited classes `FamilyCar` (with extra data, e.g. numberOfSeats) and `SportsCar` (with extra data, e.g. maxAcceleration). (Invent your own, if you can think of better ones.)
    - You need to provide constructors and display functions for each of the inherited classes but make sure you use the base class functions whenever possible, rather than rewriting existing code.
    - Write a program to store some cars dynamically, using an array of pointers to `Car`, and display them.
    - Does it display *all* the data about the cars, including the data not in the base class?
    - Does it deallocate all memory correctly?

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