

**Baku Higher Oil School**  
**Programming and Computer Applications-2**  
**Instructor : PhD, Associate Professor Leyla Muradkhanli**  
**Lab work 6. Inheritance**

Q1. Write code to show inheritance hierarchy for **Person**(name, age) class.

Use **Person** as the base class of the hierarchy, then include classes

**Faculty**(department, position) and **Student**(major, year) that derive from **Person**.

Continue to extend the hierarchy as deep (i.e., as many levels) as possible. For

example, **Administrator** and **Teacher** might derive from **Faculty** class and

**Undergraduate**, and **Graduate** might derive from **Student** class.

Q2. Write a C++ program to design a base class **Student** (id, fname, lname, math, physics, chemistry). Accept the marks of three subjects in base class. Derive a class **Total\_marks** from **Student** which includes a function to find the total marks obtained. Derive a class **Average\_marks** from **Total\_marks** which calculates and displays the average marks of student.

Add all details of five students.

Display student having highest average marks.