The programming task:

Create a program to support kindergarten meals!

Create an *enum* structure to handle special diet types (normal, gluten sensitive, lactose sensitive, insulin resistance, vegetarian)

Create a **Children** class to describe a child (name, sign, parent's phone number) and store if you have need for some special diet.

Create a **Group** class in which we record children in a group. Make it an *assign* and *take out* methods. A child should only be listed once!

Make it possible to query in a parameterized way how much of the given diet should be prepared in the group.

The **Kindergarten** class stores the name, address and consists of groups.

Create the toString() method by collecting order numbers for diets from all groups.

Create a **Food** class that stores the name of the food, the type of diet, and its energy content. Allow us to provide meals per category for 5 days in kindergarten.

Create a String weeklyMenu() method that lists the dishes.

Create a method that lists all the groups in the nursery and the children in the groups. Also provide headcount (numbers of children) data!

Create a **Test** class to verify that all classes and methods work correctly. Create 1 kindergarten with 4 groups of 15-20 children to assign to groups. Print the group and name list.

Prepare meals that you plan for 1 week in kindergarten. Then print out the weekly menu as well.

Only a solution that complies with purely object-oriented principles can be evaluated! (Eg only related properties are placed in a class, classes do not contain public data members (except constants), etc.)

When the basic task is ready, you can switch to the extra tasks.

• If you also record the daily meals (breakfast, ten o'clock, lunch, snack) and the weekly menu in the program compiles and displays the menu in this format.

- If a *search(String name)* method is available from kindergarten that searches for a child with that name, and lists which group you belong to and what diet you are on.
- If, when compiling the weekly menu, you can use a *weeklyMenuReady()* method to query if there is food on the menu for each day.