Task:

You have to write a program in C++ that can be used for staff holiday management.

Write a C++ program based on object-oriented principles (the program must contain one or more classes) that covers at least the following situation.

Initial Situation:

You want to create a program for the staff holiday management at your college.

Each employee is entitled to 30 days off per year.

Employees who have reached the age of 50 on 1 January of the current calendar year are entitled to a holiday of 32 days.

The following data of each employee is stored in the system:

- Surname
- First name
- Date of birth
- Days of holiday already taken

In addition, there should be the following three subclasses, which inherit the properties from the Employee class:

HourlyEmployee, from whom the following additional information is stored in the system:

- Hourly wage
- Hours worked

SalariedEmployee

- Annual salary

Manager

- Profit sharing

When the program starts, the "database" of the holiday management is empty, the data must first be entered.

The data must only be available during runtime (no permanent storage necessary!).

Task:

Create a program that covers the following situation:

• Staff holiday management for a maximum of 500 employees (can be HourlyEmployee, SalariedEmployee, Manager)

• Creating and deleting an employee

• Entering the days on which the employee wants to take a holiday (must be possible more than once)

• Search for an employee and output of his/her data and how many remaining days of holiday he/she has

• Listing of all stored employee data

Use comments in the source code to document your program.