

CMPT 1020 - Assignment # 2

Question 1) Design a class named Employee. The class should keep the following information:

- Employee full name (a string)
- Employee number (an integer)
- Hire year

Write one or more constructors and the appropriate accessor and mutator functions for the class.

Next, write a class named ProductionWorker that is derived from the Employee class. The ProductionWorker class should have member variables to hold the following information:

- Shift (an integer)
- Hourly pay rate (a double)

The workday is divided into two shifts: day and night. The shift variable will hold an integer value representing the shift that the employee works. The day shift is shift 1, and the night shift is shift 2. Write one or more constructors and the appropriate accessor and mutator functions for the class. Demonstrate the classes by writing a program that uses a ProductionWorker object.

Name the program file production.cpp

Question 2) In a particular factory a shift supervisor is a salaried employee who supervises a shift. In addition to a salary, the shift supervisor earns a yearly bonus when his or her shift meets production goals. Design a ShiftSupervisor class that is derived from the Employee class you created in Question 1. The ShiftSupervisor class should have a member variable that holds the annual salary and a member variable that holds the annual production bonus that a shift supervisor has earned. Write one or more constructors and the appropriate accessor and mutator functions for the class. Demonstrate the class by writing a program that uses a ShiftSupervisor object.

Name the program file Supervisor.cpp