

Task # 01 (10 points)

Design and implement a `class` `dayType` that implements the day of the week in a program. The `class` `dayType` should store the day, such as Sun for Sunday. The program should be able to perform the following operations on an object of type `dayType`:

- Set the day.
- Print the day.
- Return the day.
- Return the next day.
- Return the previous day.
- Calculate and return the day by adding certain days to the current day. For example, if the current day is Monday and we add 4 days, the day to be returned is Friday. Similarly, if today is Tuesday and we add 13 days, the day to be returned is Monday.
- Add the appropriate constructors.

Write the definitions of the functions to implement the operations for the class `dayType` as defined above. Also, write a program to test these operations on this class in main program.

Task # 02 (10 points)

In this exercise, you will design a class `memberType`.

- Each object of `memberType` can hold the name of a person, member ID, number of books bought, and amount spent.
- Include the member functions to perform the various operations on the objects of `memberType`—for example, modify, set, and show a person's name. Similarly, update, modify, and show the number of books bought and the amount spent.
- Add the appropriate constructors.
- Write the definitions of the member functions of `memberType`.
- Write a program to test various operations of your class `memberType`.

Task # 03 (10 points)

Create a structure called `employee` that contains these members: an employee number (type `int`), employee name (type `string`), employee age (type `int`) and the employee's compensation (in dollars; type `float`). Include the following member functions for an employee:

- Default constructor
- Constructor with parameters
- Destructor
- Set function for each data member
- Get function (value-returning) for each data member
- Print function for each data member
- Update function for each data member

Ask the user to fill in this data for three employees, store it in three variables of type `employee`, and then display the information for each employee.