CS-M10B – Object Oriented Programming Using C++

Project Assignment #6

Student Name: .

Student ID Number: .

This project is based on an Employee class:

* + - * Define a class named ‘*Employee*’
      * The class maintains the following private data members:
        + Employee’s first name (string)
        + Employee’s last name (string)
        + Gender (character – **M**ale, **F**emale or **U**ndefined)
        + Number of dependents (integer)
        + Annual salary (double)
      * The class maintains also a static integer value, indicating the number of employees
      * The class has two overloaded constructors, one parameterized and one is not. The parameterized constructor initializes all of the data members described above. The non-parameterized constructor initializes the name (first and last to null strings, gender to undefined, dependents to 0 and annual salary to $20,000.
      * The class has accessor and modifier functions for all of its data members. Some of the modifiers (setters) perform input validation as follows:
      * If gender is anything other than M, F or U it will be set as ‘U’
      * Number of dependents must be in the range of 0 – 10 inclusive. If the input is below this range, it will be set to 0, if it is above the range it will be set to 10
      * Annual salary must be in the range of $50,000 – $250,000 inclusive. If the input is below this range, it will be set to $50,000, if it is above the range it will be set to $250,000.
      * The class has a public function to obtain (not print) the number of employees
      * The class has a public function to calculate the weekly pay based on the annual salary. Assume 52 weeks per year.
      * The class has a public function that displays an employee’s information. See the attached executable for detail

Write a client program that will create two employees. The first uses a non-parameterized constructor, the second uses a parameterized constructor. Use the modifier functions to set the values of the first employee, based on the user input.

The client program shall subsequently display the information of both employees. See the attached executable for detail. It shall also display the number of employees.

**Please use the attached executable as a requirement specification. In case of conflict with the description above, the behavior of the executable overrides. To use the executable you must first extract the zip file.**

**Please pay attention to the format of the output. It defines the required output.**

Please submit the following:

* A **single** source code file named *week6.cpp*