CST 3503
Instructor: Adnan A. Khan
Fall 2021

Assignment 1

Assignment Due Date: Sunday October 10, 11:59pm.

Exercise 1:
Write a complete program that will have a *main* function and a function called *twice*. (*Hint: See Fig 8.7*)
   a) Write a function named *twice* whose only parameter is an integer pointer.
   b) This function doubles the value stored at the location pointed by the pointer parameter.
   c) In the main method, declare an integer variable *num* and initialize it to 5. Call the function *twice* from main such that the function *twice* will double the value of *num*.
   d) In the main method and after calling the function, print the variable *num.*

Exercise 2:
   a) In a *header* file, create a class called Employee that includes two pieces of information as *private* data members—a first name (type string) and a monthly salary (type int).
   b) Your class should have a constructor that initializes the two data members.
   c) Provide a *set* and a *get* function for each data member. If the parameter of the set function for monthly salary is not positive, then monthly salary should be set to 0.
   d) In a *separate* file, write a test program (containing main method) that demonstrates class Employee's capabilities.
      i.   Create two Employee objects with different *names* and *salaries*.
      ii. Raise the salary of each Employee (object) by 10 percent. Then display each Employee's (objects) new *yearly* salary.

Submission:

Submit the assignment via Blackboard. From the CST3503 Course in Blackboard.
Click *Assignments and Classwork* link on the left panel. Click on Assignment folder and then on Assignment1. After that, scroll down and you will see a browse button. Click on it to attach the zipped (.zip) file. Then press the Submit button.
   • Name of the zipped file should be your lastname_assign1 (e.g., khan_assign1)
   • Make sure zipped file contains all code files (like .cpp, .h files).
   • Do **not** submit only **.sln** file as it cannot be opened from another computer.

Late Submission:
   • 10% off each week from due date.