Homework 1

Due: 09/07/2017 by 10:00 pm in Blackboard

Please read Chapter 1 of the textbook and answer the following questions. Submit your work through blackboard.

Question 1: Describe the objectives of computer security (CIA) in your own words.

* The objectives of computer security is to provide confidentiality, integrity and availability.
  + In order to provide confidentiality, it makes sure that only authorized users are allowed access to the system.
  + In order to provide integrity, making sure that everything works as intended, and that no unauthorized users have access to the systems, or the ability to modify the data.
  + In order to provide availability, it assures that systems work correctly and allow service to the correct authorized users.

Question 2: What are the assets of a computer? Please briefly describe each category of them.

* Assets of a computer:
  + Hardware: The keyboard, mouse and monitor for the user to do their job.
  + Software: The correct programs / Applications are available to the user.
  + Data: The correct files are available to the user
  + Communication lines / Networks: Messages are not destroyed and communication lines or networks are always available.

Question 3: Please complete Problem 1.5 on the text book (page 29 on 4th edition, page 39 on 3rd edition).

1. The security flaw in the program I believe is this only checks for ERROR\_ACCESS\_DENIED, and if dwRet is equal to this, then the user is blocked and informs the user that access is denied. Any other enum passes the check and the user is allowed access.
2. If (dwRet == USER\_ACCESS\_ALLOWED){

//security check OK.

}Else{

//security check failed

//Inform user that access is denied

This makes sure that the user is allowed to access this specifically, and that any other returned enum is not allowed to have access to the system.