

# NES 202 – Introduction to UNIX Programming Assignment #1

## Objective

Develop a C program on UNIX system.

## Description

Write a C program that deals with ATM cards.

Each ATM card should have the following information:

- Holder Name: Full name of the person who owns the card (first name and last name).
- Card number: a 6 digits number.
- Expiration date: month and year of expiration.
- Balance: amount of available money in the card.
- Pin number: a 3-digits number.

Define a struct that includes the card information is must.

Your program should read the card information of the user, check validity of all inserted information (ex: card number contains 6 digits only), then display a welcome message and show the following menu-list of available operations:

1. Check balance.
2. Withdrawal.
3. Deposit.
4. Change Pin number.
5. Edit name.
6. Renew card (i.e. extend expiration date)
7. Print card information.
8. Exit.

After your program read the user's choice, it should perform the operation (if possible) and display an appropriate output, then show the menu-list again until the user selects to exit.

You should implement each operation in separate function and main function call these functions. The main function **MUST** not contain any details about operations.

## Required Files:

Your Program must contain:

1. One header file that contains the struct definition, functions prototypes, and any other needed definitions.
2. Two source files:
  - a. The first one contains the implementation of main function only.
  - b. The second one contains the implementations of all required functions except main.
3. Makefile that contains the rules of creating the object files and executable file of your program.

## Submission:

- Put all needed files in one folder and compress it then upload the compressed file on the link of submission programming assignment 1 on Elearning.
- Zero credit will be assigned for each program that has compile error or cheating case.
- Partial credit will be given to programs that executed correctly but give different results than the required in description above.

## Important Notes:

- The execution of your program will be done using **make** command only.
- You should write your name and id in the top of each file as comments.
- You should format your output to be clear and meaningful.
- You should work individually. Groups are NOT allowed.
- You can get help in C programming from chapter 15 in textbook.