Assignment #6

Objective: Develop a simple C/C++ application on LINUX system

Requirements (100 pts)

1. Download text file from class website: employees.db
2. Write a C or C++ application (name the executable as **`qsalary, qsalary_static, qsalary_shared`**)

   The **`executable`** will take ONE command line argument, the name of the data file such as employees.db

   Upon execution, user will be prompted to enter last name and first name, then to display the salary info of that employee to the screen, and prompt you to question if you want to continue to query another employee enter? Or enter "q" or "n" to exit
3. You MUST write at least two program files. One contains the main function only named as qsalary.{c,cpp}; The other one contains the needed functions or class member functions if using C++, named as employee.c. You MUST have a local header file: employee.h where the employee data structure or class is defined.
4. You are required to build a static library (libemployee.a) and a shared library (libemployee.so) from the 2nd program, employee.o
5. You should build/create two executables, qsalary_static to build static library and the executable built with the static library; and one to build shared library and the executable built with the shared library. one built with static library (libemployee.a), the other one built/linked to the shared library (libemployee.so).
6. Write two simple bash script for step 4 &5: build_static.sh and build_shared.sh (remember to remove the static library before running build_shared.sh)
7. Write a Makefile to use "make" utility to build the application (step 4 & 5, static only) and name the executable as qsalary.

Submission

- Create a directory hw6 under your cs390 directory and work under hw6. Hw6 should contains at least the following (executables and libraries are optional):
  1. employee.h,
  2. employee.cpp
  3. qsalary.cpp (contains the main function)
  4. build_static.sh & build_shared.sh
  5. Makefile
  6. Original downloaded employees.db

- Add the above files to git, then push to gitlab by due date. (Please don't add object files and libraries and executables to git)