Programming Assignment Three

Read the attached c program and finish two tasks.

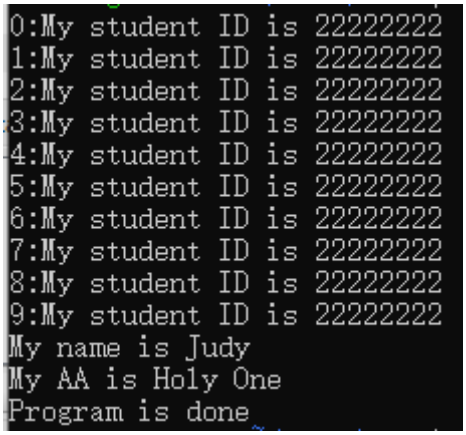
Task 1

Compile this program in Linux environment and run the program three times. Put the three results in the end of this program as comments and explain why outputs are in different order in three times. If the outputs are same for three runs, you can change the *i* value in *studentIDfunc* to a big one and try.

Task 2

Make changes to the program following the steps below.

1. Change the name, ID and AA to your real name, student ID, your Academic Advisor name respectively. Attention: If the above-required information about you is incorrect, you will not get the marks for this assignment.
2. Make the changes to the program so that in each run of the program, it should produce the following outputs (Where you should replace the information with your real student ID, your real name in pinyin and you real Academic Advisor name)



   When you do this assignment, you can refer to slides 36, 37, 45, and the example for bounded buffer problem in Lecture ch6_7_Process_Synchronization.
3. Put the output of your program in the end of the program as comments (below the comments in the first tasks.)
4. Change the program file name to P3_####.c where #### is last four digits of your student ID.
5. Semaphore must be used to solve this task!

Submission

Submit only one .c file that includes updated source code and the required comments from task 1 and task 2 at the end of program.