Name: Biao Ye
USC ID: 3074459818
email: biaoye@usc.edu

Summary:
In this project of phase 1, I build connections between hospitals and health center. Hospitals open their input files (HosptialA.txt, HosptialB.txt or HosptialC.txt) and opens a TCP connection with the USC health center to send departments' names and the required range of severity of symptoms of each department.

As soon as the USC health center receives the packets with departments' names and the range of severity of symptoms requirements of the departments from all the hospitals, it stores locally the available departments in the system along with the hospitals names who offer the departments. And I choose to store the data in files(A.txt, B.txt and C.txt).

Notes that I choose to use fork() function to create a child process in phase 1 when a new TCP connection is accepted. This is useful when different clients are trying to connect to the same server simultaneously. And I use sleep() function to verify that it is useful.

The static TCP port number of my Database in the first phase will be 6000+818 = 6818.

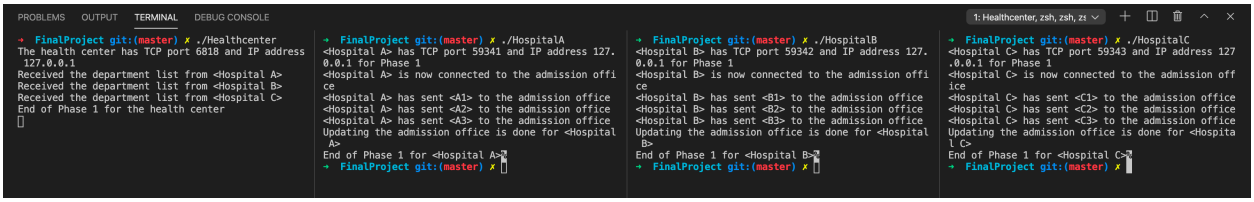
Compilation Steps on terminal:

```
1. g++ -o Healthcenter Healthcenter.cpp
2. g++ -o HospitalA HospitalA.cpp
3. g++ -o HospitalB HospitalB.cpp
4. g++ -o HospitalC HospitalC.cpp
```

Executing Steps:

```
1. ./Healthcenter
2. ./HospitalA
3. ./HospitalB
4. ./HospitalC
```

Executing Results:



A.txt

B.txt

C.txt