1. For the milestone 3 I created 3 functions which are “addAppointment”, “removeAppointment” and “viewAllAppointments”
2. void addAppointment(struct Appointment\* appointments, int maxAppointments, struct Patient\* patients, int maxPatient);

The purpose of this function is to add a new appointment and also to check availability of appointment in the data. This function also provides the time limit in which user can book their appointment which is more user friendly and flexible for any user who wants to book the appointment.

1. void removeAppointment(struct Appointment\* appointments, int maxAppointments, struct Patient\* patients, int maxPatient);

The purpose of this function is to remove the application from the data which are completed or which are canceled the function work by getting the user info like name date month year and day for which user book an appointment which is more convenient than to look in a whole list of appointments and search for the one to cancel by this the application will be more efficient and user do not get any problem when he or she wants to delete the appointment.

1. void viewAllAppointments(struct ClinicData\* clinic\_data);

the purpose of this function is to show all the appointments that are already exist in the data by which when user wants to book the appointment he or she can have the list when the appointment is available and the function shows all the appointments by the user name booking year, month, date, day so it would be more convenient for the new user to book their appointment.

1. The function “addAppointment” which I wrote in my code is more than 125 lines in which many of them I wrote by using the pattern reorganization by that I break down the each part of the code and try to understand it very precisely also I use to code very perfectly so I use to indent the lines for the formatting of my code I use some logical variables that are easy to know for any developer if he or she go through the code that how I used to write this function in my code.
2. As compare with the other two assignments this one is little though and it also took a lot of time to organize and think to proper logic for each function. Although, there are very less funtions that we have to make but the logic level is little higer so it takes more time as when the assignment official assign to us I read the whole pdf for 2 times and properly understand how I have to work in the each function at the first I started creating the function viewallAppointment which takes my lot of times but onece I create the logic then I easily complete that part as it take 3 hours of mine the another one is the addAppointment function here I fell little difficult because I have to add a appointment on multiple option like year month date so after like few hours I sort it out ad complete the function and the rest other function is kind of easy for me but when I completed the code and test it I found many error of arrays and pointers so I manage to clear one by one that takes my 1 whole day and then finally I just complete my code.