Answer 1:

Part a:

int getZeroPositiveInt(void);

void getNoSpaceString(char c\_string[], char prompt[], int minChar, int maxChar);

void capitalizeString(char c\_string[], char prompt[], int minChar, int maxChar);

part b:

int newAccountNum(const struct Account account[], int arraySize);

void getPassword(char password[]);

int loadAccounts(struct Account accounts[], int arraySize);

void writeRemovedAccounts(struct Account accounts[]);

int readArchiveAccount(void);

int updateAccountFile(struct Account accounts[], int arraySize);

part c:

ticket .h

int newTicketNum(struct Ticket tickets[], int arraySize);

void getNewTicket(struct Ticket tickets[], int accountNum, char displayName[]);

void getMessage(struct Ticket tickets[], char accountName[], char accountType);

void removeTickets(struct Ticket tickets[], int arraySize, int accountNum);

void updateTicketStatus(struct Ticket tickets[], int option, char agentName[], char accountType);

int loadTickets(struct Ticket tickets[], int arraySize);

int updateTicketFile(struct Ticket tickets[], int arraySize);

int writeArchiveTickets(struct Ticket tickets[], int arraySize);

int readArchiveTickets(void);

part d:

void displayAgentTicketsHeader(void);

//display the header of the tickets for customers

void displayCustomerTicketsHeader(void);

//display customer tickets

void displayCustomerTickets(const struct Ticket\* tickets, int arraySize, int accountNumber);

//displays messages

void displayDetailedMessages(const struct Ticket tickets[]);

//displays new or active tickets for agents only

//option 1 for new tickets while option 0 for active tickets

void displayAgentTickets(const struct Ticket tickets[], int arraySize, int option);

void menuUpdateTcktAgent(struct Ticket tickets[], char agentName[]);

//Display Customer menu

void menuCustomer(struct Account\* account, struct Ticket\* tickets, int ticketArraySize);

//main login process

int loginProcess(const struct Account\* account, int arraySize);

//update ticket menu for customers

void menuCustomerUpdateTckt(struct Ticket tickets[], char accountName[]);

//takes input of the ticket number and displays message for that ticket number.

//account Number is 0 for agents and a customer account number for customers

//agent option is for new and active tickets which is 0 for customers

int validTicketNumMsg(const struct Ticket tickets[], int arraySize, int accountNum, int agentOption);

int findTicketIndexByTickNum

(int ticketNum, char prompt[], const struct Ticket tickets[], int arraySize, int selection);

UI.h