```
// Group number : B
// Group member name : Bhanu Teja Solipeta
// Date : 10/10/2022
// Email : bhanu.solipeta@okstate.edu
/* Description : Displaying column names according to the file selected from options.txt
         Saving records according to the user option from the data obtained from processes
*/
//In client.c
#define MAX 200
void read_options(int sockfd)
{
        char buff[MAX],no_of[50];
        char data[MAX],option[MAX],opt[100][100];
        int n,no_of_opts;
                bzero(buff, sizeof(buff));
                read(sockfd, buff, sizeof(buff));
                printf("The Options are: \n %s \n",buff);
         char * token = strtok(buff, ",");
         int j=0;
         while(token != NULL){
             printf("%d . %s \n",j+1, token);
                       j++;
             token = strtok(NULL, ",");
        }
                printf("\nplease enter one of the options");
                scanf("%s",data);
                write(sockfd, data, sizeof(data));
```

```
printf("the available columns are , please select one of the column\n");
                 bzero(buff, sizeof(buff));
                 read(sockfd, buff, sizeof(buff));
                 printf("%s",buff);
                 scanf("%s",option);
                 printf("Please enter exit to quit");
                 if ((strncmp(buff, "exit", 4)) == 0) {
                         printf("Client Exit...\n");
                         exit(0);
                 }
}
//Option2: Saving the records
if(sel == 2){
              FILE *fptr = fopen("op.txt", "wb");
              fwrite(fie, sizeof(char), sizeof(fie), fptr);
              fclose(fptr);
        }
        }else if(atoi(input) == 2){
         FILE *fptr = fopen("out.txt","wb");
          for(int i=0;i<200;i++){
         if(strlen(arr[i]) !=0){
              char* token = strtok(arr[i], s);
              int j=1;
              //printf("===> %d \n",flag);
              while(token != 0){
```

```
if(j== flag){
                      token = strtok(0,s);
                 }
                      fprintf(fptr, " %s,", token);
                      token = strtok(0,s);
                      j++;
        }
        fprintf(fptr, "\n");
        fprintf(fptr, "\n");
      }
//In server.c
// read the message from client and copy it in buffer
                read(connfd, buff, sizeof(buff));
                printf("%s",buff);
                // print buffer which contains the client contents
                if(strcmp(buff,"bookInfo.txt")==0){
                        char column_names[50] = "Book category, Star rating, Stock";
                        char column_option[100];
                        write(connfd,column_names,sizeof(column_names));
                        printf("Waiting for column options\n");
                        read(connfd, column_option, sizeof(column_option));
                        printf("%s \n",column_option);
                        if((strcmp(column_option,"book
category")==0)||(strcmp(column_option,"book")==0)){
                                printf("%s",column_option);
                        } else if((strcmp(column_option,"star
rating")==0)||(strcmp(column_option,"star")==0)){
```

```
printf("%s",column_option);
                       }else if(strcmp(column_option,"stock")){
                               printf("%s",column_option);
                       }else{
                               printf("Hello world \n");
                       }
               }else if(strcmp(buff,"amazonBestsellers.txt")==0){
                       char column_names[50] = "User rating, Year, Genre";
                       char column_option[100];
                       write(connfd,column_names,sizeof(column_names));
                       printf("Waiting for column options\n");
                       read(connfd, column_option, sizeof(column_option));
                       printf("%s \n",column_option);
                       if((strcmp(column_option,"user
rating")==0)||(strcmp(column_option,"user")==0)){
                            printf("%s",column_option);
                       } else if(strcmp(column_option,"year")==0){
                            printf("%s",column_option);
                       }else if(strcmp(column_option,"genre")){
                            printf("%s",column_option);
                       }else{
                               printf("Hello world \n");
                       }
               }
               else{
                       printf("option Not Available");
               }
```

```
// if msg contains "Exit" then server exit and chat ended.
                 if (strncmp("exit", buff, 4) == 0) {
                         printf("Server Exit...\n");
                 //
                          break;
                 }
}
//In process.c
//copy process results into arr
       char arr[200][200];
       for(int i = 0; i < 200; i++){
         strcpy(arr[i], process_array[choice][i]);
       }
       //send array to server
       if(write(fout[1], arr, sizeof(sizeof(char) * 200) * 200) < 0){</pre>
         return 1;
       }
    }
```

```
else if(option == 2){
  for(int i = 0; i < processes; i++){</pre>
    char process_str[100];
    sprintf(process_str, "%s\n", values[i]);
    strcat(str, process_str);
  }
    size_t length = strlen(str);
  write(fout[1], str, length);
    read(fin[0], buffer, sizeof(buffer));
     int choice;
  for(int i = 0; i< processes; i++){</pre>
    if(strcmp(values[i], buffer) == 0){
       choice = i;
       break;
    }
  }
char arr[200][200];
  for(int i = 0; i < 200; i++){
    strcpy(arr[i], process_array[choice][i]);
  }
if(write(fout[1], arr, sizeof(sizeof(char) * 200) * 200) < 0){</pre>
    return 1;
  }
```