Assignment Submission Report

Assignment Info

Title :
2122 Sem 2 Assignment

Description :
Submission deadline: 18 April 2022 (Monday) 23:59

Assignment Submission Result

Submission Time :
April 11, 2022, 5:30 p.m.

Score :
100.0

Submission Details

Question: 2122 Sem 2 AS

Please refer to the attached file for the question content.

Language: C

Submission time: April 11, 2022, 5:30 p.m.

Score: 100

Code

Submitted Code:

```
        /*edit*/

/*custom header*/
#include <stdio.h>
#include <string.h>
typedef struct
{
    char name[20];
    int ID;
    int status;
} Seat;

void listTakenSeat(Seat *s, int *size);
void assignSeat(Seat *s, int *size);
void removeSeat(Seat *s, int *size);

        /*end_edit*/
        /*edit*/
/* Write your code here */


int main(){
    Seat s[5];
    int k, size, choice;
    int result;
    size=0;
    for (k=0; k<5; k++){
        s[k].status=0;
    }



    printf("NTU AIRLINES SEATING RESERVATION PROGRAM: \n");
    printf("1: listTakenSeat()\n");
    printf("2: assignSeat()\n");
    printf("3: removeSeat()\n");
    printf("4: quit\n");

    do {
        printf("Enter your choice: \n");
        scanf("%d", &choice);
        switch (choice) {
         case 1:
             listTakenSeat(s, &size);
             break;

         case 2:
             assignSeat(s, &size);
             break;
         case 3:
             removeSeat(s, &size);
             break;
      }
   } while (choice < 4);
```

```
   return 0;
}


void listTakenSeat(Seat *s, int *size){
    int i;
    printf("listTakenSeat():\n");
    //if all seats are empty, display the message
    if (*size==0){
        printf("The seat assignment list is empty\n");
    }
    else if (*size!=0){
        for (i=0; i<5; i++){

            if (s[i].status==1){
                printf("Customer name: %s\n", s[i].name);
                printf("Seat number (ID): %d\n", s[i].ID);
            }

        }
    }
    //else print the list of seat assignments

}
void assignSeat(Seat *s, int *size){
    int i, seatNum, dexter;
    char *p;
    char dummy[80];

    printf("assignSeat():\n");

    //if the plane is full, display the message and break;
    if (*size==5){
        printf("The plane is full\n");
    }

    while (*size!=5){
    //read in selected seat number (ID) and customer name from user
    printf("Enter the seat number:\n");
    scanf("%d", &seatNum);

    if (seatNum<1 || seatNum>5){
       //if selected seat number is not between 1 and 5, display message
       printf("Please enter a seat number between 1 and 5\n");
       scanf("%d", &seatNum);
       //prompt user input again
    }
    for (i=0; i<5; i++){
        if (s[i].ID== seatNum){
            //If selected seat has been assigned to another customer already
            printf("Occupied! Please choose another seat \n");
            scanf("%d", &seatNum);}
    }
    while ((seatNum<1)|| (seatNum>5)){
        printf("Please enter a seat number between 1 and 5\n");
        scanf("%d", &seatNum);
```

```
        for (i=0; i<*size; i++){
            if (s[i].ID== seatNum){
                //If selected seat has been assigned to another customer already
                printf("Occupied! Please choose another seat \n");
                scanf("%d", &seatNum);}
        }
        if (seatNum<1 || seatNum>5){
            //if selected seat number is not between 1 and 5, display message
            printf("Please enter a seat number between 1 and 5\n");
            scanf("%d", &seatNum);
            //prompt user input again
            break;
        }



        }
    if ((seatNum>=1) && (seatNum<=5)){
        s[seatNum-1].ID=seatNum;
        printf("Enter customer name:\n");
        fgets(dummy, 80, stdin);
        fgets(s[seatNum-1].name, 80, stdin);
        if (p=strchr(s[seatNum-1].name,'\n')){
            *p = '\0';

        }
        s[seatNum-1].status=1;
        //After assignment, display the message
        printf("The seat has been assigned successfully \n");
        (*size)++;
        break;

    }

    }



}
void removeSeat(Seat *s, int *size){
    int seatNum, i, j, k;
    i=0;
    j=-1;
    char *target;
    printf("removeSeat():\n");
    if (*size==0){
        //if all the seats are empty prior to removal, display message
        printf("All the seats are vacant\n");
        return;
    }
    if (*size!=0){
        //read user input for selected seat number (ID)
        printf("Enter the seat number: \n");
        scanf("%d", &seatNum);
        if (seatNum>=1 && seatNum <=5 && s[seatNum-1].status ==0){
            printf("Empty! Enter another seat number for removal\n");
```

```
            scanf("%d", &seatNum);
        }
        while ((seatNum<1) || (seatNum>5)){
            //if selected seat number is not between 1 and 5, display message
            printf("Please enter a seat number between 1 and 5\n");
            //prompt user input again
            scanf("%d", &seatNum);
            if (s[seatNum-1].status!=1){
            //if selected seat is empty, display message
                printf("Empty! Enter another seat number for removal\n");
                scanf("%d", &seatNum);
            }
        }



            while (seatNum>=1 &&seatNum<=5 ){
            //else: remove selected seat and display message
            target=s[seatNum-1].name;
            while((j == -1) && (i < (*size))) {
                if (strcmp(target,s[i].name) == 0){
                    j = i;
                }

                else{
                    i++;
                }
            }

            s[i].status=0;
            --(*size);

            printf("Removal is successful\n");
            return;
        }

    }

}









        /*end_edit*/
```

Analysis:

Code analysis report(to be built)

Test Case Result:

Test Case Set: **Pretest** **0.00 %**

Score: 100

Grading method: Give mark for every test case passed

Test Inputs:

```
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : The seat assignment list is empty ; Actual output : The sea
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Inputs:

```
2
1
SC Hui
2
2
PC Tan
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit  ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : Customer name: SC Hui  ; Actual output : Customer name: SC
Output Correct
Expected output : Seat number (ID): 1 ; Actual output : Seat number (ID): 1
Output Correct
Expected output : Customer name: PC Tan  ; Actual output : Customer name: PC
Output Correct
Expected output : Seat number (ID): 2 ; Actual output : Seat number (ID): 2
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Inputs:

```
2
11
12
3
SC Hui
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully  ; Actual output :
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : Customer name: SC Hui  ; Actual output : Customer name: SC
Output Correct
Expected output : Seat number (ID): 3 ; Actual output : Seat number (ID): 3
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Inputs:

```
2
1
SC Hui
2
1
11
3
PC Tan
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Occupied! Please choose another seat ; Actual output : Occu
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : Customer name: SC Hui  ; Actual output : Customer name: SC
Output Correct
Expected output : Seat number (ID): 1 ; Actual output : Seat number (ID): 1
Output Correct
Expected output : Customer name: PC Tan  ; Actual output : Customer name: PC
Output Correct
Expected output : Seat number (ID): 3 ; Actual output : Seat number (ID): 3
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Inputs:

```
2
1
SC Hui
2
2
KY Lam
2
5
NY Ng
2
4
BK Tan
2
3
N Lim
2
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
```

```
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : The plane is full ; Actual output : The plane is full
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : Customer name: SC Hui  ; Actual output : Customer name: SC
Output Correct
Expected output : Seat number (ID): 1 ; Actual output : Seat number (ID): 1
Output Correct
Expected output : Customer name: KY Lam  ; Actual output : Customer name: KY
Output Correct
Expected output : Seat number (ID): 2 ; Actual output : Seat number (ID): 2
Output Correct
Expected output : Customer name: N Lim  ; Actual output : Customer name: N Li
Output Correct
Expected output : Seat number (ID): 3 ; Actual output : Seat number (ID): 3
Output Correct
Expected output : Customer name: BK Tan  ; Actual output : Customer name: BK
Output Correct
Expected output : Seat number (ID): 4 ; Actual output : Seat number (ID): 4
Output Correct
Expected output : Customer name: NY Ng ; Actual output : Customer name: NY Ng
Output Correct
Expected output : Seat number (ID): 5 ; Actual output : Seat number (ID): 5
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Inputs:

```
3
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : removeSeat(): ; Actual output : removeSeat():
Output Correct
Expected output : All the seats are vacant ; Actual output : All the seats ar
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Inputs:

```
2
1
SC Hui
3
7
1
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:   ; Actual output : Enter customer nam
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : removeSeat(): ; Actual output : removeSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Removal is successful ; Actual output : Removal is successf
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : The seat assignment list is empty ; Actual output : The sea
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Inputs:

```
2
1
SC Hui
2
2
PC Tan
3
1
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit  ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : removeSeat(): ; Actual output : removeSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Removal is successful ; Actual output : Removal is successf
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : Customer name: PC Tan  ; Actual output : Customer name: PC
Output Correct
Expected output : Seat number (ID): 2 ; Actual output : Seat number (ID): 2
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Inputs:

```
2
1
SC Hui
3
5
11
4
1
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit  ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : removeSeat(): ; Actual output : removeSeat():
Output Correct
Expected output : Enter the seat number: ; Actual output : Enter the seat num
Output Correct
Expected output : Empty! Enter another seat number for removal ; Actual outpu
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Empty! Enter another seat number for removal  ; Actual outp
Output Correct
Expected output : Removal is successful ; Actual output : Removal is successf
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : The seat assignment list is empty ; Actual output : The sea
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Inputs:

```
2
1
SC Hui
2
2
PC Tan
3
1
2
2
11
5
N Lim
3
11
4
2
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit  ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : removeSeat(): ; Actual output : removeSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Removal is successful ; Actual output : Removal is successf
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Occupied! Please choose another seat ; Actual output : Occu
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully  ; Actual output :
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
```

```
Expected output : removeSeat(): ; Actual output : removeSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Empty! Enter another seat number for removal ; Actual outpu
Output Correct
Expected output : Removal is successful ; Actual output : Removal is successf
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : Customer name: N Lim  ; Actual output : Customer name: N Li
Output Correct
Expected output : Seat number (ID): 5 ; Actual output : Seat number (ID): 5
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Case Set: **Test Case 1** 10.00 %

Score: 100

Grading method: Give mark for every test case passed

Test Inputs:

```
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : The seat assignment list is empty ; Actual output : The sea
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Case Set: **Test Case 2** 10.00 %

Score: 100

Grading method: Give mark for every test case passed

Test Inputs:

```
2
1
SC Name1
2
2
PC Name2
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit  ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : Customer name: SC Name1  ; Actual output : Customer name: S
Output Correct
Expected output : Seat number (ID): 1 ; Actual output : Seat number (ID): 1
Output Correct
Expected output : Customer name: PC Name2  ; Actual output : Customer name: P
Output Correct
Expected output : Seat number (ID): 2 ; Actual output : Seat number (ID): 2
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Case Set: **Test Case 3** **10.00 %**

Score: 100

Grading method: Give mark for every test case passed

Test Inputs:

```
2
11
12
3
SC Name1
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully  ; Actual output :
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : Customer name: SC Name1  ; Actual output : Customer name: S
Output Correct
Expected output : Seat number (ID): 3 ; Actual output : Seat number (ID): 3
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Case Set: **Test Case 4** 10.00 %

Score: 100

Grading method: Give mark for every test case passed

Test Inputs:

```
2
1
SC Name1
2
1
11
3
PC Name2
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Occupied! Please choose another seat ; Actual output : Occu
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : Customer name: SC Name1  ; Actual output : Customer name: S
Output Correct
Expected output : Seat number (ID): 1 ; Actual output : Seat number (ID): 1
Output Correct
Expected output : Customer name: PC Name2  ; Actual output : Customer name: P
Output Correct
Expected output : Seat number (ID): 3 ; Actual output : Seat number (ID): 3
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Case Set: **Test Case 5** 10.00 %

Score: 100

Grading method: Give mark for every test case passed

Test Inputs:

```
2
1
SC Name1
2
2
KY Lam
2
5
NY Ng
2
4
BK Name2
2
3
N Lim
2
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
```

```
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : The plane is full ; Actual output : The plane is full
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : Customer name: SC Name1  ; Actual output : Customer name: S
Output Correct
Expected output : Seat number (ID): 1 ; Actual output : Seat number (ID): 1
Output Correct
Expected output : Customer name: KY Lam  ; Actual output : Customer name: KY
Output Correct
Expected output : Seat number (ID): 2 ; Actual output : Seat number (ID): 2
Output Correct
Expected output : Customer name: N Lim  ; Actual output : Customer name: N Li
Output Correct
Expected output : Seat number (ID): 3 ; Actual output : Seat number (ID): 3
Output Correct
Expected output : Customer name: BK Name2  ; Actual output : Customer name: B
Output Correct
Expected output : Seat number (ID): 4 ; Actual output : Seat number (ID): 4
Output Correct
Expected output : Customer name: NY Ng ; Actual output : Customer name: NY Ng
Output Correct
Expected output : Seat number (ID): 5 ; Actual output : Seat number (ID): 5
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Case Set: **Test Case 6** **10.00 %**

Score: 100

Grading method: Give mark for every test case passed

Test Inputs:

```
3
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : removeSeat(): ; Actual output : removeSeat():
Output Correct
Expected output : All the seats are vacant ; Actual output : All the seats ar
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Case Set: **Test Case 7** 10.00 %

Score: 100

Grading method: Give mark for every test case passed

Test Inputs:

```
2
1
SC Name1
3
7
1
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:   ; Actual output : Enter customer nam
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : removeSeat(): ; Actual output : removeSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Removal is successful ; Actual output : Removal is successf
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat(): ; Actual output : listTakenSeat():
Output Correct
Expected output : The seat assignment list is empty ; Actual output : The sea
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Case Set: **Test Case 8** **10.00 %**

Score: 100

Grading method: Give mark for every test case passed

Test Inputs:

```
2
1
SC Name1
2
2
PC Name2
3
1
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit  ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : removeSeat(): ; Actual output : removeSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Removal is successful ; Actual output : Removal is successf
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : Customer name: PC Name2  ; Actual output : Customer name: P
Output Correct
Expected output : Seat number (ID): 2 ; Actual output : Seat number (ID): 2
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Case Set: **Test Case 9** 10.00 %

Score: 100

Grading method: Give mark for every test case passed

Test Inputs:

```
2
1
SC Name1
3
5
11
4
1
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit  ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : removeSeat(): ; Actual output : removeSeat():
Output Correct
Expected output : Enter the seat number: ; Actual output : Enter the seat num
Output Correct
Expected output : Empty! Enter another seat number for removal ; Actual outpu
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Empty! Enter another seat number for removal  ; Actual outp
Output Correct
Expected output : Removal is successful ; Actual output : Removal is successf
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : The seat assignment list is empty ; Actual output : The sea
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100

Test Case Set: **Test Case 10** **10.00 %**

Score: 100

Grading method: Give mark for every test case passed

Test Inputs:

```
2
1
SC Name1
2
2
PC Name2
3
1
2
2
11
5
N Lim
3
11
4
2
1
4
```

Test Results:

```
Expected output : NTU AIRLINES SEATING RESERVATION PROGRAM: ; Actual output :
Output Correct
Expected output : 1: listTakenSeat() ; Actual output : 1: listTakenSeat()
Output Correct
Expected output : 2: assignSeat() ; Actual output : 2: assignSeat()
Output Correct
Expected output : 3: removeSeat() ; Actual output : 3: removeSeat()
Output Correct
Expected output : 4: quit  ; Actual output : 4: quit
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice:  ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully ; Actual output : T
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : removeSeat(): ; Actual output : removeSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Removal is successful ; Actual output : Removal is successf
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : assignSeat(): ; Actual output : assignSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Occupied! Please choose another seat ; Actual output : Occu
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Enter customer name:  ; Actual output : Enter customer name
Output Correct
Expected output : The seat has been assigned successfully  ; Actual output :
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
```

```
Expected output : removeSeat(): ; Actual output : removeSeat():
Output Correct
Expected output : Enter the seat number:  ; Actual output : Enter the seat nu
Output Correct
Expected output : Please enter a seat number between 1 and 5 ; Actual output
Output Correct
Expected output : Empty! Enter another seat number for removal ; Actual outpu
Output Correct
Expected output : Removal is successful ; Actual output : Removal is successf
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct
Expected output : listTakenSeat():  ; Actual output : listTakenSeat():
Output Correct
Expected output : Customer name: N Lim  ; Actual output : Customer name: N Li
Output Correct
Expected output : Seat number (ID): 5 ; Actual output : Seat number (ID): 5
Output Correct
Expected output : Enter your choice: ; Actual output : Enter your choice:
Output Correct  ( 100 marks scored )
```

Score: 100