```c
#include<stdio.h>
#include<stdlib.h>
int curId = 1;
char status[7][10] = {" Invalid "," General "," Ladies ","Handicap"," Senior ",
"  VIP  "};
struct personInQueue{
    char name[20];
    // Weightages: VIP=5, Senior =4, Handicap=3, Ladies=2, General =1
    int weightage, regId;
    struct personInQueue *next;
}*first;
struct personInQueue* askForDetails(){
    struct personInQueue *newEntry = (struct personInQueue*) malloc(sizeof(struct personInQueue));
    newEntry->next = NULL;
    newEntry->regId=curId++;
    printf("Enter your name: ");
    scanf("%s",&newEntry->name);
    printf("From the following: 1.General \t 2.Ladies\t 3.Handicap\t 4.Senior\t
 5.VIP\n");
    printf("Choose your status: ");
    scanf("%d",&newEntry->weightage);
    if(newEntry->weightage > 5 || newEntry->weightage < 1)
        newEntry->weightage = 0;
    return newEntry;
}
void queuePerson(struct personInQueue *new){
    if(first==NULL){
        first = new;
        printf("Succesfully queued at first and only pos\n");
        return;
    }
    if(first->weightage < new->weightage){
        new->next = first;
        first = new;
        printf("Succesfully queued at first pos\n");
        return;
    }
    struct personInQueue *check = first;
    struct personInQueue *prev = first;
    while( (check!=NULL && check->weightage >= new->weightage ) ){
        //printf("Going behind of %s",check->name);
        prev = check;
        check = check->next;
    }
    new->next = prev->next;
    prev->next = new;
    printf("Succesfully queued\n");
}
```

```c
void display(){
    struct personInQueue *traverse = first;
    printf("Queue of reservation priority wise: \n");
    while (traverse!=NULL){
        printf(".----------------------.\n");
        printf("|    %s (%s)\t|\n",traverse->name,status[traverse->weightage]);
        printf("'----------------------'\n");
        traverse = traverse->next;
    }
    printf("End\n");
}
int main(){
    int choice, el;
    while (1){
     printf("Do you want to reserve ticket for any person? Yes: 1  /  No: 0\n");
        printf("Answer: ");
        scanf("%d",&choice);
        if(choice)
            queuePerson(askForDetails());
        else
            break;
    }
    display();
    return 0;
}
```

Output :

```
Do you want to reserve ticket for any person? Yes: 1  /  No: 0
Answer: 1
Enter your name: Omkar
From the following: 1.General    2.Ladies        3.Handicap      4.Senior        5.VIP
Choose your status: 1
Succesfully queued at first and only pos
Do you want to reserve ticket for any person? Yes: 1  /  No: 0
Answer: 1
Enter your name: Prajakta
From the following: 1.General    2.Ladies        3.Handicap      4.Senior        5.VIP
Choose your status: 2
Succesfully queued at first pos
Do you want to reserve ticket for any person? Yes: 1  /  No: 0
Answer: 1
Enter your name: Sachin
From the following: 1.General    2.Ladies        3.Handicap      4.Senior        5.VIP
Choose your status: 5
Succesfully queued at first pos
Do you want to reserve ticket for any person? Yes: 1  /  No: 0
Answer: Ashok
Enter your name: From the following: 1.General    2.Ladies        3.Handicap      4.Senior        5.VIP
Choose your status: 4
Succesfully queued
Do you want to reserve ticket for any person? Yes: 1  /  No: 0
Answer: Rutika
Enter your name: From the following: 1.General    2.Ladies        3.Handicap      4.Senior        5.VIP
Choose your status: 2
Succesfully queued
```

Do you want to reserve ticket for any person? Yes: 1 / No: 0
Answer: 1
Enter your name: Karan
From the following: 1.General   2.Ladies   3.Handicap   4.Senior   5.VIP
Choose your status: 1
Succesfully queued
Do you want to reserve ticket for any person? Yes: 1 / No: 0
Answer: 1
Enter your name: Anil
From the following: 1.General   2.Ladies   3.Handicap   4.Senior   5.VIP
Choose your status: 3
Succesfully queued
Do you want to reserve ticket for any person? Yes: 1 / No: 0
Answer: 1
Enter your name: Rohit
From the following: 1.General   2.Ladies   3.Handicap   4.Senior   5.VIP
Choose your status: 5
Succesfully queued
Do you want to reserve ticket for any person? Yes: 1 / No: 0
Answer: 1
Enter your name: Ankita
From the following: 1.General   2.Ladies   3.Handicap   4.Senior   5.VIP
Choose your status: 2
Succesfully queued
Do you want to reserve ticket for any person? Yes: 1 / No: 0
Answer: 0
Queue of reservation priority wise:
```
.----------------------.
|    Sachin ( VIP  )   |
'----------------------'

.----------------------.
|    Rohit ( VIP  )    |
'----------------------'

.----------------------.
|    Ashok ( Senior )  |
'----------------------'

.----------------------.
|    Anil (Handicap)   |
'----------------------'

.----------------------.
|   Prajakta ( Ladies  |
'----------------------'

.----------------------.
|    Rutika ( Ladies ) |
'----------------------'

.----------------------.
|    Ankita ( Ladies ) |
'----------------------'

.----------------------.
|    Omkar ( General ) |
'----------------------'

.----------------------.
|    Karan ( General ) |
'----------------------'
```
End
PS E:\Programming assignments\DS\Queues>