SOURCE CODE:

```c
#include<stdio.h>
struct node
{
    char name[100];
    int age;
    char address[100];
    int phone;
    char bloodgroup[100];
    int reg;
    int priority;
    struct node *next;
};
struct node *start= NULL;
struct node *insert(struct node *);
struct node *delete(struct node *);
int main()
{
    int option;
do{
printf("\n\n\n\n WELCOME TO SREE HOSPITAL!\n");
printf("-----------------------------\n");
printf("1.ADD A PATIENT\n");
printf("2.DELETE A RECORD\n");
printf("3.DISPLAY ALL APPOINTMENTS BASED ON PRIORITY\n");
printf("4.EXIT\n");
printf("Enter your choice:");
scanf("%d",&option);
    switch(option)
    {
    case 1:
        start= insert(start);
getchar();
break;
    case 2:
        start= delete(start);
getchar();
break;
    case 3:
        display(start);
getchar();
break;
    case 4:
exit(0);
break;
    }
}while(option!=4);
}
struct node *insert(struct node *start)
```

```c
{
    int val2,val4,val6,pri;
    char val1,val3,val5;
    struct node *ptr,*p;
    char* name[100];
    char* address[100];
ptr=(struct node*)malloc(sizeof(struct node));
printf("Enter patient Name:");
scanf(" %s",ptr-> name);
printf("Enter the patient's age:");
scanf("%d",&val2);
printf("Enter your home address:");
scanf(" %s",ptr->address);
printf("Enter your phone number:");
scanf("%d",&val4);
printf("Enter the blood group of Patient:");
scanf(" %s",ptr->bloodgroup);
printf("Enter the reg no:");
scanf("%d",&val6);
table();
printf("Enter your disease Number:");
scanf("%d",&pri);
ptr->age=val2;
ptr->phone=val4;
ptr->reg=val6;
ptr->priority=pri;
    if((start==NULL)||pri<start->priority)
    {
ptr->next=start;
        start=ptr;
    }
    else
    {
        p=start;
        while(p->next!=NULL && p->next->priority <=pri)
        p=p->next;
ptr->next=p->next;
        p->next=ptr;
    }
    return start;
};
struct node *delete(struct node *start)
{
    struct node *ptr;
    if(start==NULL)
    {
printf("\n NO PATIENT RECORD TO DELETE");
return;
    }
    else
```

```c
    {
ptr= start;
printf("\n Deleted Record reg num is: %d",ptr->reg);
    start=start->next;
    free(ptr);
    }
    return start;
};
void display(struct node *start)
{
    struct node *ptr;
ptr=start;
    if(start==NULL)
printf("\nTHERE IS NO PATIENT");
    else
    {
printf("\Priority wise appointments are:\n");
    while(ptr!=NULL)
    {
printf("The name of patient is:%s\n",ptr->name);
printf("The age of patient is:%d\n",ptr->age);
printf("The address of patient is : %s\n",ptr->address);
printf("Phone Number:%d\n",ptr->phone);
printf("The blood group of patient is:%s\n",ptr->bloodgroup);
printf("-------------------------------\n");
ptr=ptr->next;
    }
    }
getchar();
}
void table()
{
printf("\t\tPlease Refer this Table for your disease!\n");
printf("1.Heart attack\n");
printf("2.Severe wound/Bleeding\n");
printf("3.Cancer\n");
printf("4.Chest pain\n");
printf("5.Fracture\n");
printf("6.Diabetes Checkup\n");
printf("7.Infection\n");
printf("8.Viral Fever\n");
printf("9.Common Cold/Head ache\n");
}
```

OUTPUT

/tmp/DD30KwTfuC.o
WELCOME TO SREE HOSPITAL!

1.ADD A PATIENT
2.DELETE A RECORD
3.DISPLAY ALL APPOINTMENTS BASED ON PRIORITY
4.EXIT
Enter your choice:1
Enter patient Name:vasu
Enter the patient's age:32
Enter your home address:nandyal
Enter your phone number:2345678190
Enter the blood group of Patient:o+ve
Enter the reg no:1
Please Refer this Table for your disease!
1.Heart attack
2.Severe wound/Bleeding
3.Cancer
4.Chest pain
5.Fracture
6.Diabetes Checkup
7.Infection
8.Viral Fever
9.Common Cold/Head ache
Enter your disease Number:3
WELCOME TO SREE HOSPITAL!

1.ADD A PATIENT
2.DELETE A RECORD
3.DISPLAY ALL APPOINTMENTS BASED ON PRIORITY
4.EXIT
Enter your choice:1
Enter patient Name:sree
Enter the patient's age:45
Enter your home address:kurnool
Enter your phone number:98734102
Enter the blood group of Patient:ab+ve
Enter the reg no:2
Please Refer this Table for your disease!
1.Heart attack
2.Severe wound/Bleeding
3.Cancer
4.Chest pain
5.Fracture
6.Diabetes Checkup
7.Infection
8.Viral Fever
9.Common Cold/Head ache

Enter your disease Number:8
WELCOME TO SREE HOSPITAL!

1.ADD A PATIENT
2.DELETE A RECORD
3.DISPLAY ALL APPOINTMENTS BASED ON PRIORITY
4.EXIT
Enter your choice:1
Enter patient Name:joy
Enter the patient's age:67
Enter your home address:chittor
Enter your phone number:912345670
Enter the blood group of Patient:o-ve
Enter the reg no:3
Please Refer this Table for your disease!
1.Heart attack
2.Severe wound/Bleeding
3.Cancer
4.Chest pain
5.Fracture
6.Diabetes Checkup
7.Infection
8.Viral Fever
9.Common Cold/Head ache
Enter your disease Number:1
WELCOME TO SREE HOSPITAL!

1.ADD A PATIENT
2.DELETE A RECORD
3.DISPLAY ALL APPOINTMENTS BASED ON PRIORITY
4.EXIT
Enter your choice:3
Priority wise appointments are:
The name of patient is:joy
The age of patient is:67
The address of patient is : chittor
Phone Number:912345670
The blood group of patient is:o-ve

The name of patient is:vasu
The age of patient is:32
The address of patient is : nandyal
Phone Number:-1949289106
The blood group of patient is:o+ve

The name of patient is:sree
The age of patient is:45
The address of patient is : kurnool
Phone Number:98734102
The blood group of patient is:ab+ve

WELCOME TO SREE HOSPITAL!

1.ADD A PATIENT
2.DELETE A RECORD
3.DISPLAY ALL APPOINTMENTS BASED ON PRIORITY
4.EXIT
Enter your choice:2
Deleted Record reg num is: 3

 WELCOME TO SREE HOSPITAL!

1.ADD A PATIENT
2.DELETE A RECORD
3.DISPLAY ALL APPOINTMENTS BASED ON PRIORITY
4.EXIT
Enter your choice:3
Priority wise appointments are:
The name of patient is:vasu
The age of patient is:32
The address of patient is : nandyal
Phone Number:-1949289106
The blood group of patient is:o+ve

The name of patient is:sree
The age of patient is:45
The address of patient is : kurnool
Phone Number:98734102
The blood group of patient is:ab+ve

WELCOME TO SREE HOSPITAL!

1.ADD A PATIENT
2.DELETE A RECORD
3.DISPLAY ALL APPOINTMENTS BASED ON PRIORITY
4.EXIT
Enter your choice:4
…program finished with exit code 0
Press ENTER to exit console..