```cpp
#include<iostream>
#include<string>
#include <list>
using namespace std;

// creating LinkList
class Node
{
    public :
    Node *next;
    int priority;
    string data;
    Node(string d,int prior){
        priority = prior;
        data = d;
        next = NULL;
    }
};

class PriorityQueue{
    public:
    Node *front=NULL;

    //d is patient name , prior is priority
    void insert(string d,int prior){
        Node *temp,*rear;
        temp = new Node(d,prior);
        if(front == NULL){
            front = temp;
        }
        else
```

```cpp
    {
        //compare until position is found
        rear = front;
        while(
            rear->next!=NULL &&
             rear->next->priority >= prior
        ){
            rear=rear->next;
        }
        temp->next = rear->next;
        rear->next = temp;
    }


}
//to get name of first patient
void peek(){
    cout<<"First patient is:\t"<<front->data;
}
void pop(){
    //to remove first patient
    if(front==NULL)
        return;
    front=front->next;
}

//display all the queue
void dis()
{
    string currPrior="";
    if(front== NULL){
        cout<<endl<<"Empty queue."<<endl;
        return;
```

```cpp
            }
            cout<<endl;
            Node *curr= front;
            while(curr!=NULL){
                //hardCode the category
                if(curr->priority!=0){
                    if(curr->priority==3)
                        currPrior="Serious patient";
                    else if(curr->priority==2)
                        currPrior="Not serious patient";
                    else
                        currPrior="General checkup";
                }
                cout<<curr->data<<" with priority:\t"<<currPrior<<endl;
                curr=curr->next;
            }
        }
};


int main(){

    string name;
    int priority,ch;

    cout<<endl;
    PriorityQueue q;
    do{
        cout<<endl<<"--- MAIN MENU ---";
        cout<<endl<<"1 -> Add patient";
        cout<<endl<<"2 -> Remove patient";
        cout<<endl<<"3 -> Get all patients";
```

```cpp
cout<<endl<<"0 -> Exit";
cout<<endl<<"Choose an option (0-3):\t";
cin>>ch;

switch (ch)
{
    case 1:
    {
        cout<<"Patient name is:\t";
        cin.ignore();
        getline(cin,name,'\n');
        cout<<endl<<"Enter priority (3-High, 2-Medium, 1-General):\t";
        cin>>priority;
        q.insert(name,priority);
        break;
    }
    case 2:
    {
        q.pop();
        break;
    }
    case 3:{
        q.dis();
        break;
    }
    case 0:
        cout<<endl<<"// END OF CODE\n\n";
        exit(1);
        break;

default:
    break;
```

```
        }
    } while(ch!=0);
}
```