Data Structure and Algorithm Practicals

6. Demonstration of Linear Queue

```
<html>
   <head>
      <title>Linear Queue</title>
      <script>
         class Node
         {
            constructor()
            {
               this.data=document.getElementById("inputstr").value;
               this.next=null;
            }
         }
         class Queue
         {
            constructor()
            {
               this.front=null;
               this.rear=null;
            }
            insert()
            {
               var temp=new Node();
               if(this.rear==null)
               {
                  this.front=temp;
                  this.rear=temp;
               }
               else
               {
                  this.rear.next=temp;
                  this.rear=temp;
               }
            }
            display()
            {
               if(this.front==null)
               {
                  document.getElementById("outputstr").innerHTML="Queue is E
mpty";
               }
               else
               {
                  var curr=this.front;
                  var str="Elements of Linear Queue are : <br>Front --> ";
                  while(curr!=null)
```

```
                {
                    str=str+curr.data+" --> ";
                    curr=curr.next;
                }
                    document.getElementById("outputstr").innerHTML=str+"Rea
r";
            }
        }
        delete()
        {
            if(this.front==null)
            {
                document.getElementById("outputstr").innerHTML="Queue is E
mpty";
            }
            else
            {
                var temp=this.front;
                this.front=this.front.next;
                if(this.front==null)
                {
                    this.rear=null;
                }
                document.getElementById("outputstr").innerHTML="Deleted Ele
ment is : "+temp.data;
            }
        }
    }
    var obj=new Queue();
</script>
</head>
<body>
    <label>Linear Queue Using Linked List :</label>
    <br><br>
    <label>Enter Element Here : </label>
    <input type="text" id="inputstr"/>
    <br><br>
    <button onclick="obj.insert.call(obj)">Insert</button>
    <button onclick="obj.delete.call(obj)">Delete</button>
    <button onclick="obj.display.call(obj)">Display</button>
    <br><br>
    <p id="outputstr"></p>
</body>
</html>
```