**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 Empty";

                    }

                    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+"Rear";

                    }

                }

                delete()

                {

                    if(this.front==null)

                    {

                        document.getElementById("outputstr").innerHTML="Queue is Empty";

                    }

                    else

                    {

                        var temp=this.front;

                        this.front=this.front.next;

                        if(this.front==null)

                        {

                            this.rear=null;

                        }

                        document.getElementById("outputstr").innerHTML="Deleted Element 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>