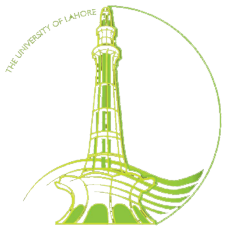

THE UNIVERSITY OF LAHORE
ISLAMABAD CAMPUS

Data Structure and Algorithms (CS13217)

Lab Report

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Experiment # 2
Queue with Array implementation

Objective
The objective of this session is to understand the various operations on queues using array structure in C++.

Software Tool
1. Language: C++

1 Theory

2 Task

2.1 Procedure: Task 2

Write a C++ code to perform insertion and deletion in queue using arrays

Create a complete menu for the above options and also create option for reusing it.

```
#include<iostream>
#include<queue>
using namespace std;
int main()
{
        int x=-1,y=0;
        int arr[10];
        char op;
        cout<<"press 1 to push"<<endl;
        cout<<"press 2 to delete"<<endl;
        cout<<"press 3 to display"<<endl;
        cout<<"press 4 to exit"<<endl;
        line:
                cin>>op;
```

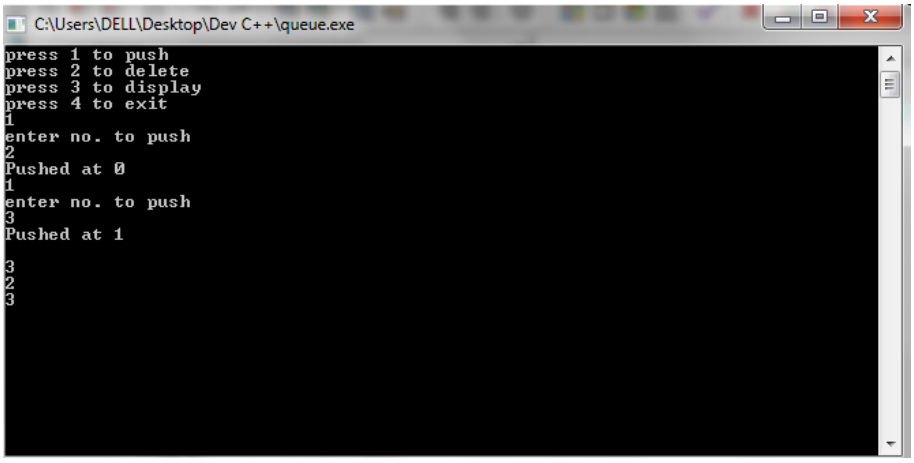

Figure 1: Link List

```
                switch(op){
                        case '1':
                                cout<<"enter no. to push"<<endl;
                                x++;
                                cin>>arr[x];
                                cout<<"Pushed at "<<x<<endl;
                                break;
                        case '2':
                                cout<<"deleting"<<endl;
                                y++;
                                break;
                        case '3':
                                for(int i=0;i<=x;i++)
                                {
                                        cout<<arr[i]<<endl;
                                }
                                break;
                        case '4':
                                exit;
                }
                goto line;
}
```

3 Conclusion

In this lab we learned how to create queue and display it on a screen and its various functions.