**Deque:**

#include <iostream>

#include<deque>

#include<algorithm>

using namespace std;

deque<int> s;

class stlDeque{

public:

void inserts(){

int a[10],n;

cout<<endl<<"Enter count:";

cin>>n;

cout<<endl<<"Enter elements do you want to push in deque:";

for(int i=0;i<n;i++){

cin>>a[i];

s.push\_front(a[i]);}

cout<<endl<<"Elements inserted successfully!!!";

}

void ins\_Front(){

int data;

cout<<endl<<"Enter element:";

cin>>data;

s.push\_front(data);

}

void ins\_Back(){

int data;

cout<<endl<<"Enter element:";

cin>>data;

s.push\_back(data);}

void display(){

cout<<endl<<"deque elements are:";

while(!s.empty()){

cout<<s.front()<<"\t";

s.pop\_front();}

}

};

int main(){

stlDeque s1;

int ch;

do{

cout<<endl<<"\*\*\*\*\*\*\*\*\*\*\*\*\*DEQUE IMPLEMENTATION USING STL\*\*\*\*\*\*\*\*\*\*\*\*";

cout<<endl<<"1.Enter Deque Elements....\n2.Insert Element at the beginning......\n3.Insert Element at the end....\n4.Display....\n5.Exit....";

cout<<endl<<"Enter your choice:";

cin>>ch;

switch(ch){

case 1:

s1.inserts();

break;

case 2:

s1.ins\_Front();

break;

case 3:

s1.ins\_Back();

break;

case 4:

s1.display();

break;

case 5:

break;

default:

cout<<endl<<"wrong choice!!!";

}

}while(ch!=5);

return 0;

}

**Output:**

\*\*\*\*\*\*\*\*\*\*\*\*\*DEQUE IMPLEMENTATION USING STL\*\*\*\*\*\*\*\*\*\*\*\*

1.Enter Deque Elements....

2.Insert Element at the beginning......

3.Insert Element at the end....

4.Display....

5.Exit....

Enter your choice:1

Enter count:4

Enter elements do you want to push in deque:12 34 56 78

Elements inserted successfully!!!

\*\*\*\*\*\*\*\*\*\*\*\*\*DEQUE IMPLEMENTATION USING STL\*\*\*\*\*\*\*\*\*\*\*\*

1.Enter Deque Elements....

2.Insert Element at the beginning......

3.Insert Element at the end....

4.Display....

5.Exit....

Enter your choice:2

Enter element:55

\*\*\*\*\*\*\*\*\*\*\*\*\*DEQUE IMPLEMENTATION USING STL\*\*\*\*\*\*\*\*\*\*\*\*

1.Enter Deque Elements....

2.Insert Element at the beginning......

3.Insert Element at the end....

4.Display....

5.Exit....

Enter your choice:3

Enter element:33

\*\*\*\*\*\*\*\*\*\*\*\*\*DEQUE IMPLEMENTATION USING STL\*\*\*\*\*\*\*\*\*\*\*\*

1.Enter Deque Elements....

2.Insert Element at the beginning......

3.Insert Element at the end....

4.Display....

5.Exit....

Enter your choice:4

deque elements are:55 78 56 34 12 33