//SE 47 (Deque)

#include<iostream>

#include<deque>

using namespace std;

int main()

{

deque<int>dq;

int n;

char ch;

do{

cout<<"Enter your choice:";

cout<<"1)Add elements from front"<<endl;

cout<<"2)Add elements from back"<<endl;

cout<<"3)Delete element from front"<<endl;

cout<<"4)Delete element from back"<<endl;

cout<<"5)Size of dque"<<endl;

cin>>n;

switch(n)

{

case 1:int x;

cout<<"Enter element to add:";

cin>>x;

dq.push\_front(x);

break;

case 2:int y;

cout<<"Enter element to add:";

cin>>y;

dq.push\_back(y);

break;

case 3:cout<<"Deleted element is "<<dq.front()<<endl;

dq.pop\_front();

break;

case 4:cout<<"Deleted element is "<<dq.back()<<endl;

dq.pop\_back();

break;

case 5:cout<<"Size of deque is "<<dq.size()<<endl;

}cout<<"Do you wish to continue(y/n)"<<endl;

cin>>ch;

}while(ch=='y'||ch=='Y');

}

Enter your choice:1)Add elements from front

2)Add elements from back

3)Delete element from front

4)Delete element from back

5)Size of dque

1

Enter element to add:2

Do you wish to continue(y/n)

y

Enter your choice:1)Add elements from front

2)Add elements from back

3)Delete element from front

4)Delete element from back

5)Size of dque

1

Enter element to add:3

Do you wish to continue(y/n)

y

Enter your choice:1)Add elements from front

2)Add elements from back

3)Delete element from front

4)Delete element from back

5)Size of dque

2

Enter element to add:3

Do you wish to continue(y/n)

y

Enter your choice:1)Add elements from front

2)Add elements from back

3)Delete element from front

4)Delete element from back

5)Size of dque

2

Enter element to add:4

Do you wish to continue(y/n)

y

Enter your choice:1)Add elements from front

2)Add elements from back

3)Delete element from front

4)Delete element from back

5)Size of dque

5

Size of deque is 4

Do you wish to continue(y/n)

y

Enter your choice:1)Add elements from front

2)Add elements from back

3)Delete element from front

4)Delete element from back

5)Size of dque

4

Deleted element is 4

Do you wish to continue(y/n)

y

Enter your choice:1)Add elements from front

2)Add elements from back

3)Delete element from front

4)Delete element from back

5)Size of dque

3

Deleted element is 3

Do you wish to continue(y/n)

y

Enter your choice:1)Add elements from front

2)Add elements from back

3)Delete element from front

4)Delete element from back

5)Size of dque

5

Size of deque is 2

Do you wish to continue(y/n)

n