

Week 2

Topics: Array, singly linked list, doubly linked list using STL

1)

1st Ary before swapping are : 11 21 31 41 51 61

2nd Ary before swapping are: 71 81 91 10 11 12

1st Ary after swapping are: 71 81 91 10 11 12

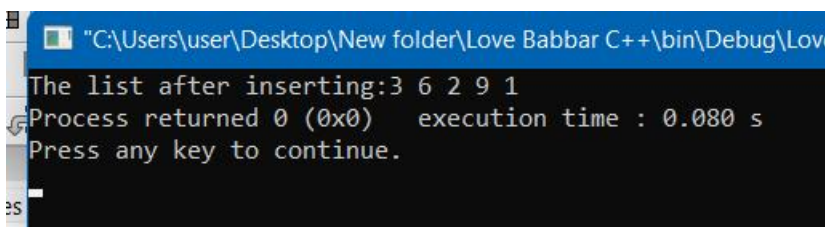
2nd Ary after swapping are: 11 21 31 41 51 61

Q.2 Write a program to insert following elements in the doubly linked list using STL:

3,6,2,9,1

After inserting the above elements delete first three elements from the doubly linked list.

```
#include <iostream>
#include <list>
using namespace std;
int main()
{
    list<int> list1;
    list1.push_back(3);
    list1.push_back(6);
    list1.push_back(2);
    list1.push_back(9);
    list1.push_back(1);
    list<int>::iterator i ;
    cout << "The list after inserting:";
    for (i = list1.begin(); i != list1.end(); i++)
        cout << *i << " ";
}
```



```
"C:\Users\user\Desktop\New folder\Love Babbar C++\bin\Debug\Love...
The list after inserting:3 6 2 9 1
Process returned 0 (0x0) execution time : 0.080 s
Press any key to continue.
```

3)

Initial List: 1 2 3 4

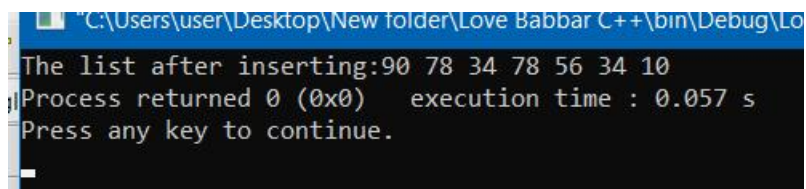
List after first resize: 1 2

List after second resize: 1 2 0 0

List after third resize: 1 2 0 0 50

Q.4 Write a program to implement singly linked list using STL with the following elements: 10, 34, 56, 78, 34, 78, 90

```
#include <iostream>
#include <forward_list>
using namespace std;
int main()
{
    forward_list<int> list1;
    list1.push_front(10);
    list1.push_front(34);
    list1.push_front(56);
    list1.push_front(78);
    list1.push_front(34);
    list1.push_front(78); list1.push_front(90);
    forward_list<int>::iterator i ;
    cout << "The list after inserting:";
    for (i = list1.begin(); i != list1.end(); i++)
        cout << *i << " ";
}
```



The screenshot shows a Windows command prompt window with the following text:

```
"C:\Users\user\Desktop\New folder\Love Babbar C++\bin\Debug\Lo
The list after inserting:90 78 34 78 56 34 10
Process returned 0 (0x0)   execution time : 0.057 s
Press any key to continue.
```