Lab Test 3 (Monday, March 13, 2017)

Task 1 (2 Marks)

- Download and install the slack app for android\ios.
- Sign in to the DSA class using the following url –

https://iium-dsa-s17.slack.com

Task 2 (8 Marks)

1) Download the file "LabTest3.zip" from slack.
2) Type the following two code snippet in the appropriate files.

Filename: Queue.h

```cpp
#ifndef QUEUE_H
#define QUEUE_H

#include "DList.h"

template<class T>
class Queue : public DList<T> {
    public:
        Queue(){

        }

        void push(T value){
            this->push_back(value);
        }

        T pop(){
            return this->pop_front();
        }
};

#endif
```

Filename: Stack.h

```cpp
1  #ifndef STACK_H
2  #define STACK_H
3
4  #include "DList.h"
5
6  template<class T>
7  class Stack : public DList<T> {
8      public:
9          Stack(){
10
11         }
12
13         void push(T value){
14             this->push_back(value);
15         }
16
17         T pop(){
18             return this->pop_back();
19         }
20 };
21
22 #endif
```

3) Now in the "main.cpp" file create a Queue and a Stack then insert 10 names into both in same order. Then without using display function print out all the elements of both containers.