Stack and Queue Implementation

Course Code: CSC 2107 Course Title: Data Structure (Lab)

Dept. of Computer Science
Faculty of Science and Technology

Lecturer No:	**5**	**Week No:**	**5**	**Semester:**	**Fall 2022-23**
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Lab Tasks

1. Write C++ code to implement Stack. You have to build the following functions and call them from the main method.

```
bool isEmpty();
bool isFull();
bool push(int Element);
bool pop();
void topElement();
void show();
```

Lab Tasks

2. Write C++ code to implement Stack using object orientation. Example-

```
class MyStack
{
        int Stack[100], Top, MaxSize;
        public:
        MyStack( int Size = 100 ){MaxSize = Size; Top = 0;}
        bool isEmpty();
        bool isFull();
        bool push(int Element);
        bool pop();
        int topElement();
        void show();
};
```

Lab Tasks

3. Write C++ code to implement Queue using object orientation. You have to build the following methods.

bool isEmpty()

bool isFull()

bool enQueue(int Element)

bool deQueue

void frontElement()

void show()