

LAB 03: . Stacks and Queues

1. Scope of Knowledge:

- Basic knowledge of Stack and Queue
- Understand basic operations with Stack
- Understand basic operations with Queue

2. Marterials/Softwares/Tools:

- Visual Studio Code

3. Coding Convention:

- All identifiers must be in English and lower case
- Follow the valid identifers naming rules in C
- Tab is 4 characters
- Curly braces must be aligned
- Statements in curly brackets must be indented by 1 tab

4. Exercise:

Exercise 1:

Complete all demo in Lesson 3 slide.

Exercise 2:

Use stack to write a program that input 10 integers and display those 10.

Requirements:

- Using array to implement stack
- The maximum number of elements in an array is 100

Exercise 3:

Write a program which uses the stack to convert a decimal number n (keyboard input) to a binary number and display the binary number to the console.

Exercise 4:

Write a program that uses queues to demonstrate the queuing system (getting queue numbers as used in hospitals, banks, ...).