

ITDEV-154 Data Structures and Algorithms
Assignment #4

- 1) What is an abstract data structure?
- 2) Describe the stack data structure.
- 3) Describe the queue data structure.
- 4) When would you choose to use a stack?
- 5) When would you choose to use a queue?
- 6) What is LIFO? Does it apply to a stack or a queue?
- 7) What is FIFO? Does it apply to a stack or a queue?
- 8) Describe a deque.
- 9) Describe a priority queue.
- 10) What is Reverse Polish Notation?

Using Visual Studio, write a C# application (console, web, windows forms) that implements and demonstrates a stack and a queue. Please provide operations for insertion and deletion of elements.