1.5 - Chapter 1 exercises
Practice Lesson 1

Ex 1: Given a list of up to 100 elements of integer type. (Non ordered list)

1.1. Declare the list structure

1.2. Fulfill the list

1.3. Display the list

1.4. Find an element in the list. (complexity of the algorithm ?)

1.5. Add new element at the end of list.

1.6. Remove the last element.

1.7. Remove the element at the position i. (complexity of the algorithm ?)

1.8. Find an element in the list. If found, remove it. (Complexity of the algorithm ?) (*)

1.5 - Chapter 1 exercises
Practice Lesson 2

Ex 3: Given an simply linked list of integer elements

3.1. Declare the data structure

3.2. Create empty list

3.3. Display the list.

3.4. Search an element in the list.

3.5. Add an element at the beginning

3.6. Remove the first element.

3.7. Add an element at the end

3.8. Remove the last element

3.9. Find an element in the list. If found, remove it

3.10 Convert this list to ordered list (*)

1.5 - Chapter 1 exercises
Practice Lesson 3

Ex 5: Given a stack up to 100 elements of integer type (stack under type solid list)

5.1. Declare data structure.

5.2. Create empty stack.

5.3. Check empty stack.

5.4. Check full stack.

5.5. Push new element

5.6. Pop an element

1.5 - Chapter 1 exercises
Practice Lesson 3

Ex 6: Using pre-constructed Stack, convert a decimal number to a binary number.

1.5 - Chapter 1 exercises
Practice Lesson 3

Ex 7: Given a queue up to 100 elements of integer type (by using solid list)

7.1. Declare data structure.

7.2. Create empty queue

7.3. Check empty list.

7.4. Check full list.

7.5. Push new element

7.6. Pop an element

1.5 - Chapter 1 exercises
Practice Lesson 4

Ex 10: Given a stack of integer elements (by using simply linked list)

10.1. Declare stack structure

10.2. Create empty stack.

10.3. Check empty stack.

10.4. Push new element.

10.5. Pop an element.

10.6. Using constructed stack, convert a decimal number to a binary number

10.7. Solve the HANOI tower (*)

1.5 - Chapter 1 exercises

Practice Lesson 4

Ex 11: Given a Queue of integer element (by using simply linked list)

11.1. Declare Queue structure.

11.2. Create empty queue.

11.3. Check full queue.

11.4. Push new element.

11.5. Pop an element.