

Assignment 4

Extend the Stack class to include:

- A function called *searchstack* that searches for a given element on a stack and returns its position in relation with the top.
- A function called *isPalindrome* to check whether an input string is a palindrome or not using a stack.
- A function to convert a decimal number to binary.

Extend the Queue class to include the following operations:

- *length* that will return the number of elements on the queue.
- *enqueueN* that will enqueue an array of N elements on the queue
- *dequeueN* that will dequeue and return an array of N elements from the queue
- *searchqueue* that searches for an item on the queue and returns its position.