

# Stack

Write a function that receives a stack as a parameter.

The function must return the largest element of the stack. Should the pass be by value or reference?

2) Write a function that receives two stacks as a parameter and checks whether they are equal. Two stacks are equal if they have the same elements, in the same order.

3) Write a function that fills a stack passed as a parameter with the elements of a vector passed as a parameter.

4) Build a program using a stack that solves the following problem:

Store the license plates of the cars (only the numbers) that are parked on a narrow dead-end street. Given a license plate, check if the car is parked on the street. If it is, inform the sequence of cars that must be removed so that the car in question can exit.

5) Using a stack, solve the following exercise:

Given a sequence containing  $N$  ( $N > 0$ ) real numbers, print it in reverse order. 6) Implement a function called TPilha, which receives a vector of integers with 15 elements. For each of them, as follows:

- if the number is even, insert it into the stack;
- if the number read is odd, remove a number from the stack;
- At the end, empty the stack by printing the elements.

7) Write a function called TPilha2 which receives as parameters 2 stacks ( $N$  and  $P$ ) and a vector of integers. For each one:

- if positive, insert into stack  $P$ ;

- if negative, insert into stack N;
- if zero, remove an element from each stack