LE - 1
Stack ADT implementation using Arrays

Introduction:
This exercise is a hands-on component for the concepts acquired in L3 lecture on Stack ADT. This introduces you to the Abstraction concept and how a data structure and its operations can be created according to the requirements.

Expected Functionality:
This exercise requires you to implement Stack Abstract Data type in Python. You should create Stack using Arrays (Lists in Python) and write the code for required operations as asked. The goal of this exercise is to make you familiar with Abstraction and several operations written within.

Starter Code:
You will be provided with stack_using_array.ipynb Python notebook. You should edit the file to implement the operations of a Stack as follows.

> **__init__()** - The constructor for the Stack class initializing the required structure.
> **push(item)** - This function should be able to push an item in the stack.
> **pop()** - This function should remove the topmost element in the stack and return it.
> **top()** - This function should return the topmost element in the stack.
> **isEmpty()** - This function should return whether the stack is empty or not.
> **size()** - This function should return the size of the stack.

Rubric:
Your code will be tested with provided test cases.

Location of the code:
The code would be provided at
https://colab.research.google.com/drive/1w0HzJwXzJDFUf7ISvGQZ-YNXWIP0KXmB

What to do when done:
Once you have completed the exercise, you should upload it to the codePost portal. Please ensure the following while submitting:
- Once satisfied with your code, you should download the file as a python script (.py file), by going to **File** > **Download** > **Download .py**
- The name of the file should be LE1.py
- Upload the python script file to codePost under the LE1 assignment

- You can run the test cases on your script up to a limit of 50 times
- Once satisfied with the test runs, complete your submission