

1. Implement stack using - (a) array, (b) dynamic array, and (c) linked list.
 - a. Each of the implementations needs to include the following methods:
 - i. push
 - ii. pop
 - iii. peek
 - iv. printStack
 - v. printStructure
 - b. Array size will be given as input.
 - c. Only C++ and Java are allowed
 - d. You will need to take input from a file. The input format is described in the next section.
 - e. You can use built-in linked lists.
 - f. You need to have three different implementations in three separate header files.
2. Input and output format:
 - a. The first line will mention what type of stack it will be. If it is an array additionally, it will also include a length.
 - i. ARRAY = array
 - ii. DARRAY = dynamic array
 - iii. LL = linked lists
 - b. Each of the following lines until the end of the file, will include an operation and an operand.
 - i. PUSH = push
 - ii. POP = pop
 - iii. TOP = peek
 - iv. PRINTS = printStack
 - v. PRINTT = printStructure

Input	Output
ARRAY 10 PUSH 1 PUSH 2 PUSH 5 POP POP TOP PUSH 4	1 2 1 5 2 1 2 1 1 1 4 1
DARRAY PUSH 1 PUSH 2 PUSH 5 POP POP TOP	1 2 1 5 2 1 2 1 1 1 4 1

PUSH 4	
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- c. After each operation, it will show the stack state.
 - d. The output will have to be printed in a file.
- 3. Bonus task.
 - a. Use generics/template to handle any data type.
- 4. Note that the spec might be updated several times until the submission deadline with additional details and modifications. Check ELMS from time to time if there are any additional updates/requirements.
- 5. Submission requirements:
 - a. Take all the codes(only codes) and put them in a folder with your roll number as the folder's name.
 - b. Compress it in .zip format and submit it.