ACS-2947 | Lab Three

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a. **Transfer Algorithm**

Input: Two stacks, S and T
Goal: Put elements from stack S to T in the FILO format

Algorithm:

- Check if the stack S is empty, if it is, return null
- Use pop() on stack S to get element E
- Push the return value (element E) of the pop() to stack T
- Repeat until stack S is empty
- Return Stack T which now has values from stack T and stack S

b. **Stack Reverse Algorithm**

Input: Two temporary stacks, namely T1 & T2, stack R
Goal: Transfer elements from both temporary stacks to R but in reversed order

Let stack R be [1, 2, 3, 4]
Algoritm:

- Return null if stack R is empty, else,
- Use pop() on R and push() the elements to T1, this will make T1 to be [4, 3, 2, 1]
- Do the same thing, pop() on T1 and push() elements to T2 making it to be [1, 2, 3, 4]
- Do it one final time by popping elements from T2 and pushing them to R, making R to be [4, 3, 2, 1]
- Return R which is now reversed