**EXERCISE Question1**

Discuss the advantages and disadvantages of an array-based implementation of the ADT stack as compared to a

link-based implementation.

**Advantages:**

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| **Array-based implementation** | **Link-based implementation.** |

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| * Array based implementation of stack is best for the applications that need a stack of fixed size. * The implementation is quite easier as the compiler supplies constructor and destructor. * For larger stack, a larger array is required, even if all of its memory is not utilized. | * A stack growth or change can be easily implemented at any time. * There is no additional time requirement for stack resize. |

**Dis-advantages:**

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| **Array-based implementation** | **Link-based implementation.** |

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| * If there is a constant change or growth in the stack, resizing of array is required. * Resizing operation takes time that the link based implementation does not need. | * As compiler won’t supply the copy constructor and the destructor, * A separate definition is required for them while implementing. |