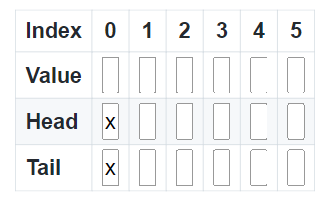
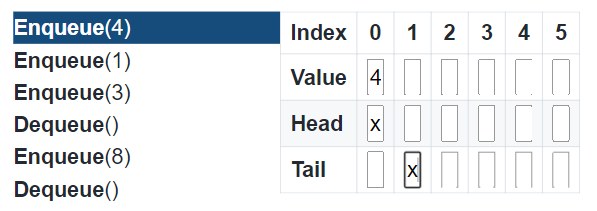
CAB301 Tutorial 3

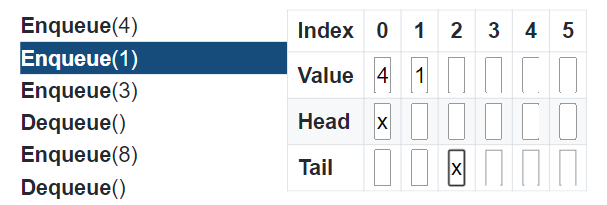
Time: 11:00 Monday, 18/03/2024

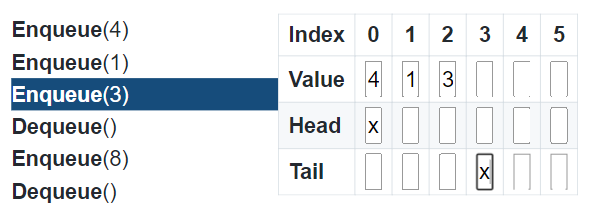
Question 1: Queue Operations

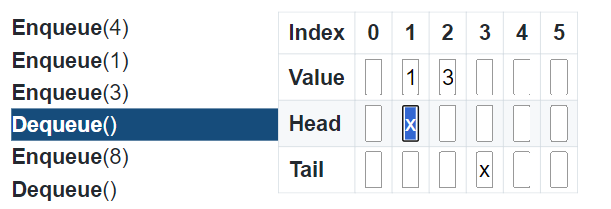
Before any operation, head and tail are at positions 0.

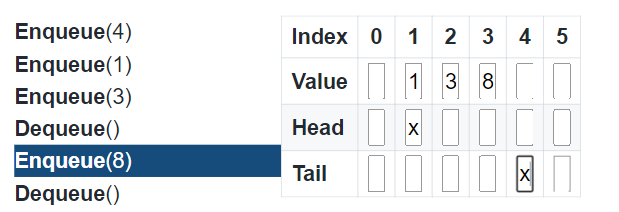


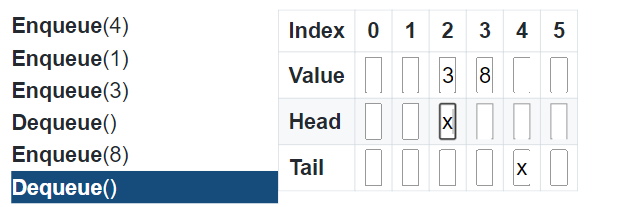






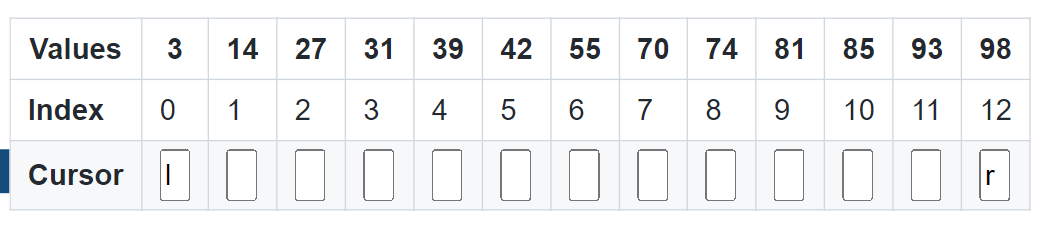




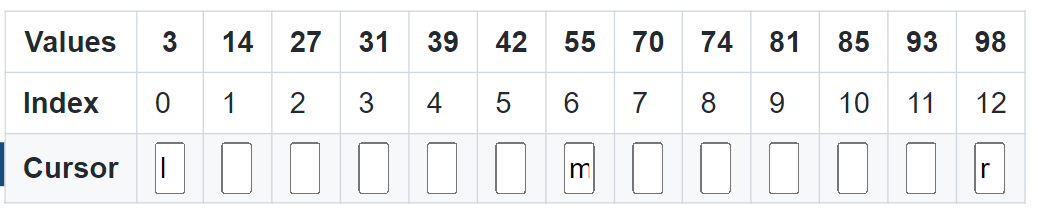


**Question 2: Binary Search**

Before search, (since there are 13 elements)



Iteration 1:

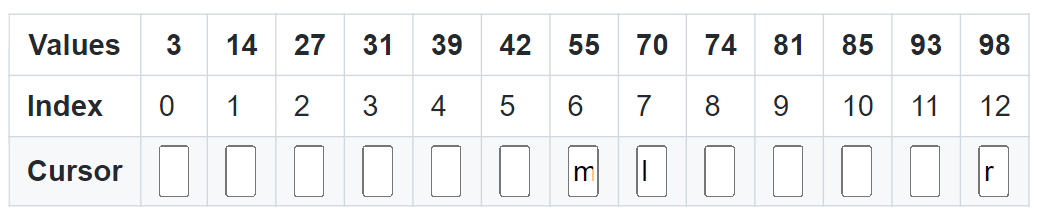


Is the same as the key ?

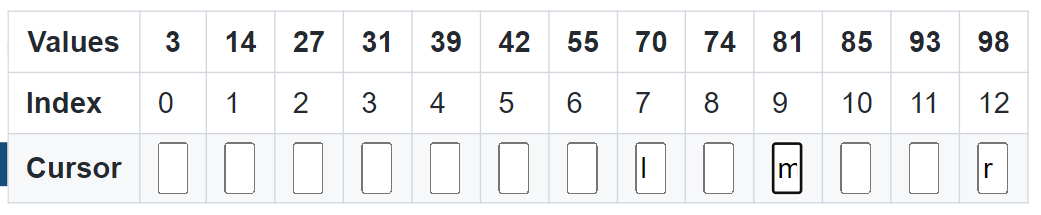
> False

Is less than the key ?

> True, hence , i.e,



Iteration 2:



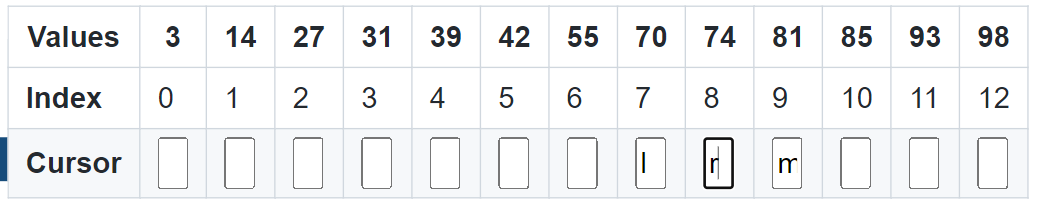
Is the same as the search key ?

> False

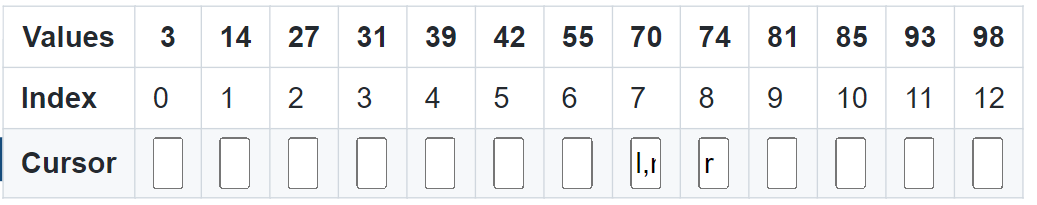
Is less than the key ?

> False

Resort to “else”, and set



Iteration 3:



Is the same as the search key

> True, return