**LAB4**

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**FIFO**

This method depends on replacing the first input in the stack by the new input we want to add and keep looping through the page numbers and replace the new ones with oldest page in our stack till the loop ends.

A picture containing text, electronics, display, screenshot

Description automatically generated

**LRU**

In this method we look for the page we needed the least in the past and replace it by new page and keep looping with the number of pages we have while removing the least recently used with new page till pages end.

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**OPTIMAL**

We look in this method for the least page we will call again in the future and we replace it by new page in order to decrease number of faults and we keep looping till we finish all pages and we implement this method by using flags and keep comparing pages we already have now with the upcoming pages we will replace with to extract the right page to replace.

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Description automatically generated

**CLOCK**

Clock or second chance method is used by using 2 reference bits (reference,modify) where we replace the page that have pairs(0,0) which is neither nearly used nor modified so it’s the best page to be replaced where the pair(1,1) means it’s frequently used and probably will be needed soon.

This method is close to FIFO method.

A screenshot of a computer

Description automatically generated with medium confidence