SIMULATE PAGE REPLACEMENT ALGORITHMS: a) FIFO

b) LRU

a) FIFO

ALGORITHM:

Start.

1. Read the length of the reference string.
2. Read the reference string.
3. Read the number of frames.
4. Assign -1 to all the frames.
5. Take reference string value and compare it with all the values in the frame set if it matches then do nothing and continue with next reference string value.

If it does not match,

1. Replace the oldest value with the current reference string value.
2. Increment the page fault count variable.

If all the frames are over then display the page fault number occurred at the current reference string.

Repeat this step until the reference string is over.

1. Display the page fault count variable which indicates the total page fault.

Stop

b) LRU

ALGORITHM:

Start.

1. Read the length of the reference string.
2. Read the reference string.
3. Read the number of frames.
4. Assign -1 to all the frames.
5. Take the reference string value and compare it with each frame value if it matches then continue with the next reference string value.

If it does not match,

1. Replace the frame value which is not much recently used with the current reference string value.
2. Increment the page fault count variable.
3. Display the page fault count variable.

Repeat this step until the reference string is over.

1. Display the page fault count variable which indicates the total page fault of the algorithm.

Stop.