Programming Assignment 4

- Implement a program that performs the FIFO, LRU, and optimal page replacement algorithms

  - Input: 1 text file (given), called **input.txt**, where:

    - The first line is for selection of algorithms out of 3 algorithm and contains one of the following character: 'F', 'L', and 'O', representing FIFO, LRU, and Optimal, respectively.

    - The second line indicates the number of physical frames (i.e., capacity),

    - The third line indicates the number of references, and

    - The fourth line shows the string of memory (page) references.

  - Output: 1 text file (for you to create), called **output.txt**, where:

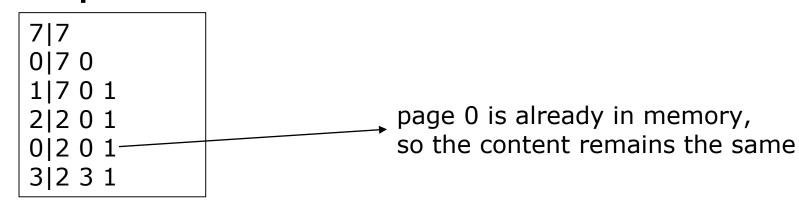   - Each line shows the contents of physical frames, for each page reference.

Programming Assignment 4 (Cont.)

- Example input and output

    - **Input.txt**

        ```
        F
        3
        6
        7 0 1 2 0 3
        ```

        ▸ Says: FIFO algorithm, # free frames = 3, # references = 6, and the reference string = "7 0 1 2 0 3"

    - **Output.txt**

        ```
        7|7
        0|7 0
        1|7 0 1
        2|2 0 1
        0|2 0 1
        3|2 3 1
        ```

        page 0 is already in memory, so the content remains the same

Programming Assignment 4 (Cont.)

- **Submission**
  - Deadline: June 9, 2019, 23:59
  - Upload your single source file and 0.5 page description to I-Class
    - Do not compress your files
    - Source file name: **page.cpp** or **page.c**
    - Description file name: **readme.txt**