Instructions for Group Assignment:

- Find the group details in the excel file.
- Allocate two members for each algorithm as responsible persons
- Find the solution for the question that is assigned to your group
- Discuss the solution among all the group members and finalize the answers
- Create a video to explain the solutions by detailing and comparing algorithms based on the number of page fault that occurs, page fault probability and percentage.
- Ensure the video includes accurate details about the solution, presented by the responsible persons for each algorithm along with their video image.
- Note that all group members should participate in the video presentation.
- Upload the video to a drive (Provide access to ramashini@uwu.ac.lk)
- Copy the drive link to a .txt file (Example: Group1.txt)
- Upload the .txt file to VLE on or before 02nd August 2024.

1. **Question for Group 1, Group 7 and Group 13**

Consider the following page reference string: 1, 2, 3, 4, 2, 1, 5, 6, 2, 1, 2, 3, 7, 6, 3, 2, 1, 2, 3, 6. Compare the following replacement algorithms, assuming three-page slots are available. Remember that all frames are initially empty, so your first unique pages will cost one fault each.

- FIFO replacement
- Optimal replacement
- LRU replacement
- LFU replacement
- Second chance replacement

2. **Question for Group 2, Group 8 and Group 14**

Consider the following page reference string: 7, 2, 3, 1, 2, 5, 3, 4, 6, 7, 7, 1, 0, 5, 4, 6, 2, 3, 0, 1. Compare the following replacement algorithms, assuming three-page slots are available. Remember that all frames are initially empty, so your first unique pages will cost one fault each.

- FIFO replacement
- Optimal replacement
- LRU replacement
- LFU replacement
- Second chance replacement

3. Question for Group 3, Group 9 and Group 15

Consider the following page reference string: 1, 2, 3, 4, 5, 3, 4, 1, 6, 7, 8, 7, 8, 9, 7, 8, 9, 5, 4, 5, 4, 2. Compare the following replacement algorithms, assuming three-page slots are available. Remember that all frames are initially empty, so your first unique pages will cost one fault each.

- FIFO replacement
- Optimal replacement
- LRU replacement
- LFU replacement
- Second chance replacement

4. Question for Group 4, Group 10, Group 16, and Group 19

Consider the following page reference string: 1,2,3,2,5,6,3,4,6,3,7,3,1,5,3,6,3,4,2,4,3,4,5,1 Compare the following replacement algorithms, assuming three-page slots are available. Remember that all frames are initially empty, so your first unique pages will cost one fault each.

- FIFO replacement
- Optimal replacement
- LRU replacement
- LFU replacement
- Second chance replacement

5. Question for Group 5, Group 11 and Group 17

Consider the following page reference string: 1,2,3,4,5,3,4,1,6,7,8,7,8,9,7,8,9,5,4,4,5,3. Compare the following replacement algorithms, assuming three-page slots are available. Remember that all frames are initially empty, so your first unique pages will cost one fault each.

- FIFO replacement
- Optimal replacement
- LRU replacement
- LFU replacement
- Second chance replacement

6. Question for Group 6, Group 12 and Group 18

Consider the following page reference string: 6, 7, 8, 9, 6, 7, 1, 6, 7, 8, 9, 1, 7, 9, 6. Compare the following replacement algorithms, assuming three-page slots are available. Remember that all frames are initially empty, so your first unique pages will cost one fault each.

- FIFO replacement
- Optimal replacement
- LRU replacement
- LFU replacement
- Second chance replacement