FIFO Page Replacement Algorithm

```
import java.util.*;

public class FIFOPageReplacement {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the number of frames: ");
        int numberOfFrames = scanner.nextInt();

        System.out.print("Enter the number of pages: ");
        int numberOfPages = scanner.nextInt();

        System.out.print("Enter the page reference string (space-separated): ");
        int[] pageReferenceString = new int[numberOfPages];
        for (int i = 0; i < numberOfPages; i++) {
            pageReferenceString[i] = scanner.nextInt();
        }

        int[] frames = new int[numberOfFrames];
        Arrays.fill(frames, -1);

        int pageFaults = 0;
        int currentIndex = 0;

        for (int page : pageReferenceString) {
            boolean pageHit = false;

            for (int frame : frames) {
                if (frame == page) {
```

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                pageHit = true;
                break;
            }
        }

        if (!pageHit) {
            frames[currentIndex] = page;
            currentIndex = (currentIndex + 1) % numberOfFrames;
            pageFaults++;
        }

        System.out.print("Frames: ");
        for (int frame : frames) {
            System.out.print(frame + " ");
        }
        System.out.println();
    }

    System.out.println("Total Page Faults: " + pageFaults);
    scanner.close();
  }
}
```

Output:

```
Enter the number of frames: 3
Enter the number of pages: 7
Enter the page reference string (space-separated): 1 3 0 3 5 6 3
Frames: 1 -1 -1 Frames: 1 3 -1
Frames: 1 3 0 Frames: 1 3 0 Frames: 5 3 0 Frames: 5 6 0 Frames: 5 6 3
Total Page Faults: 6
```