```java
package A4;

import java.io.*;
import java.util.*;

public class LRU {
   public static void main(String[] args) throws IOException {
      BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

      int frames, pointer = 0, hit = 0, fault = 0, ref_len;
      boolean isFull = false;
      int buffer[];
      ArrayList<Integer> stack = new ArrayList<Integer>();
      int reference[];
      int mem_layout[][];

      System.out.println("Please enter the number of Frames: ");
      frames = Integer.parseInt(br.readLine());

      System.out.println("Please enter the length of the Reference string: ");
      ref_len = Integer.parseInt(br.readLine());

      reference = new int[ref_len];
      mem_layout = new int[ref_len][frames];
      buffer = new int[frames];
      for (int j = 0; j < frames; j++)
         buffer[j] = -1;

      System.out.println("Please enter the reference string: ");
      for (int i = 0; i < ref_len; i++) {
         reference[i] = Integer.parseInt(br.readLine());
      }

      System.out.println();
      for (int i = 0; i < ref_len; i++) {
         if (stack.contains(reference[i])) {
            stack.remove(stack.indexOf(reference[i]));
         }
         stack.add(reference[i]);

         int search = -1;
         for (int j = 0; j < frames; j++) {
            if (buffer[j] == reference[i]) {
               search = j;
```

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                hit++;
                break;
            }
        }

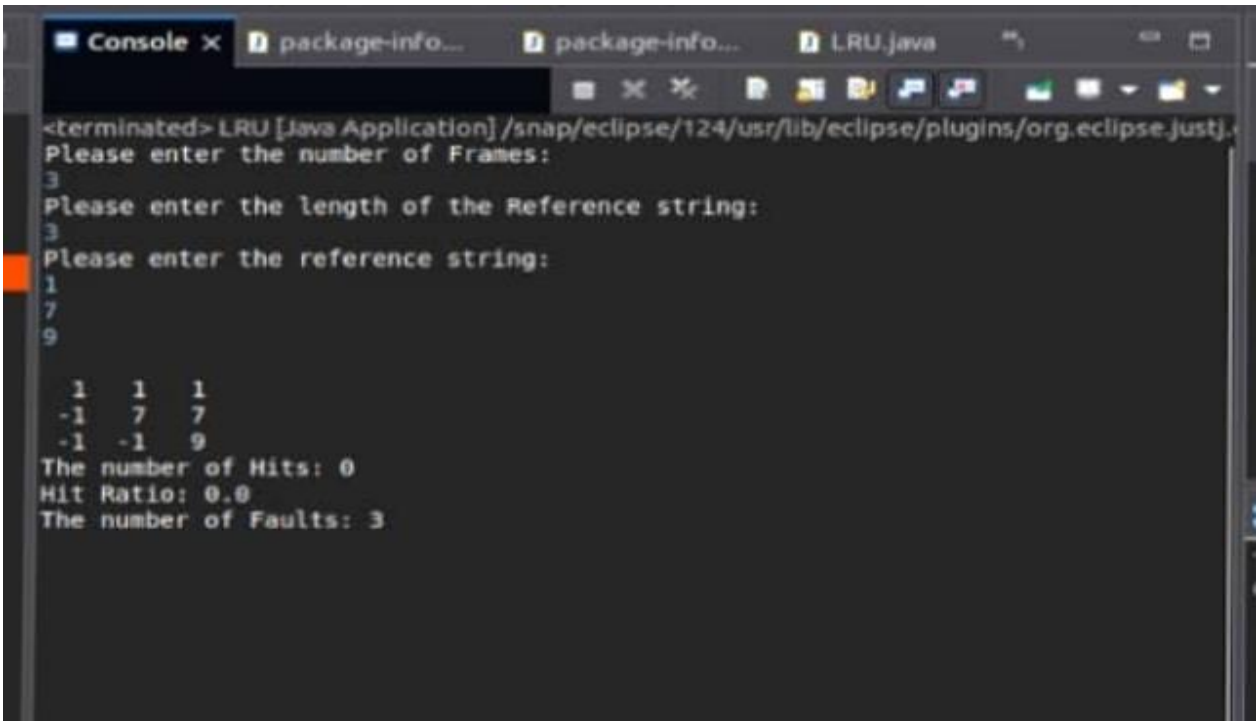
        if (search == -1) {
            if (isFull) {
                int min_loc = ref_len;
                for (int j = 0; j < frames; j++) {
                    if (stack.contains(buffer[j])) {
                        int temp = stack.indexOf(buffer[j]);
                        if (temp < min_loc) {
                            min_loc = temp;
                            pointer = j;
                        }
                    }
                }
            }
            buffer[pointer] = reference[i];
            fault++;
            pointer++;
            if (pointer == frames) {
                pointer = 0;
                isFull = true;
            }
        }

        for (int j = 0; j < frames; j++)
            mem_layout[i][j] = buffer[j];
    }

    System.out.println("Memory Layout:");
    for (int i = 0; i < frames; i++) {
        for (int j = 0; j < ref_len; j++)
            System.out.printf("%3d ", mem_layout[j][i]);
        System.out.println();
    }

    System.out.println("The number of Hits: " + hit);
    System.out.println("Hit Ratio: " + (float) hit / ref_len);
    System.out.println("The number of Faults: " + fault);
  }
}
```

Output:


Console
package-info...
package-info...
LRU.java
<terminated> LRU [Java Application] /snap/eclipse/124/usr/lib/eclipse/plugins/org.eclipse.justj.
Please enter the number of Frames:
3
Please enter the length of the Reference string:
3
Please enter the reference string:
1
7
9
1 1 1
-1 7 7
-1 -1 9
The number of Hits: 0
Hit Ratio: 0.0
The number of Faults: 3