Sosna Tariku

Hashing Lab

March 11, 2020

1.

A. N=13

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Key(pk) | lp | q | offset | Final lp |
| 12 | 12 | 0 | 19 | 12 |
| 53 | 1 | 4 | 4 | 1 |
| 130 | 0 | 10 | 10 | 0 |
| 23 | 10 | 1 | 1 | 10 |
| 121 | 4 | 9 | 9 | 4 |
| 114 | 10 | 8 | 8 | 5 |
| 4 | 4 | 0 | 19 | 3 |
| 123 | 6 | 9 | 9 | 6 |
| 27 | 1 | 2 | 2 | 7 |
| 21 | 8 | 1 | 1 | 8 |

Final Array- 130, 53, 0, 4, 121, 114, 123, 27, 21, 0, 23, 0, 12

B.

|  |  |  |
| --- | --- | --- |
| Key(pk) | lp | Llnk list at lp |
| 12 | 2 | 12 |
| 53 | 3 | 53 |
| 130 | 0 | 130 |
| 23 | 3 | 23,53 |
| 121 | 1 | 121 |
| 114 | 4 | 114 |
| 4 | 4 | 4, 114 |
| 123 | 3 | 23, 53, 123 |
| 27 | 7 | 27 |
| 21 | 1 | 21, 121 |

Final Array- **[130], [21, 121], [12], [23, 53, 123], [4, 114], [], [], [27], [], []**

**2.**

|  |  |  |
| --- | --- | --- |
| Key | Llnear | buckets |
| 53 | 1 | 3 |
| 4 | 3 | 2 |
| 114 | 2 | 2 |
| 27 | 4 | 1 |
| 21 | 1 | 1 |
| 12 | 1 | 2 |