|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| count |  |  |  |  |  |
| 3 | 100 | 30 | 10 |  | !(30>100) can’t insert 30 |
| 2 | 30 | 10 | 100 |  | !(30>30) can’t insert 30 |
| 1 | 10 | 100 | 30 |  | (30>10) insert 30 first, then push 10 |
| 0 | 100 | 30 | 30 | 10 | New queue after insertion |

Current queue: 100 30 10

Insert: 30

Running time: *O(n)*