

## Solution to Distincto's Raffle – AIO 2023

The simple idea behind my approach is as follows: we loop through each entry, either we have, or haven't seen it before.

If we haven't seen that entry before:

- We add it to the list of seen entries
- We add it to a list of POTENTIAL WINNERS

If we have seen it before:

- We remove that entry from the list of potential winners

After looping through all the entries doing these 2 operations, in the list of potential winners, we will be left with only the entries that are unique or distinct, after which we can just output the smallest one. Written as code this is:

```
N, K = map(int, input().split())
entries = list(map(int, input().split()))

seen = set() # set of values we have seen before
winners = set() # set of potential winners
# this will contain the winning value after we go through the entire array of
entries

for i in range(N):
    entry = entries[i]

    if entry not in seen:
        seen.add(entry)
        winners.add(entry)

    elif entry in seen and entry in winners:
        #if an element has already been removed, don't need to remove it again
        winners.remove(entry)

# output the Lowest surviving entry
print(min(winners))
```