

NAMUNAVIY MASALALAR

1-masala. Takrorlarni olib tashlash

n ta butun son berilgan. Takrorlanuvchi elementlarni olib tashlab, qolganlarini o'sish tartibida chiqaring.

Yechim (set + sorted)

```
n = int(input())
a = list(map(int, input().split()))

res = sorted(set(a))
print(*res)
```

2-masala. Eng ko'p uchragan element

Ketma-ketlikda eng ko'p uchragan sonni toping. (Agar bir nechta bo'lsa — kichigini chiqaring.)

Yechim (dict)

```
n = int(input())
a = list(map(int, input().split()))

cnt = {}
for x in a:
    cnt[x] = cnt.get(x, 0) + 1

mx = max(cnt.values())
ans = min(x for x in cnt if cnt[x] == mx)
print(ans)
```

3-masala. Birinchi noyob element

Ketma-ketlikda faqat 1 marta uchraydigan elementlar ichidan birinchisini toping. Agar yo'q bo'lsa -1.

Yechim (dict + list)

```
n = int(input())
a = list(map(int, input().split()))

cnt = {}
for x in a:
    cnt[x] = cnt.get(x, 0) + 1

ans = -1
for x in a:
    if cnt[x] == 1:
        ans = x
        break
```

```
print(ans)
```

4-masala. Ikki to'plam kesishmasi

Ikki ketma-ketlik berilgan. Ularning kesishmasini takrorlarsiz, o'sish tartibida chiqaring.

Yechim (set)

```
n = int(input())
a = set(map(int, input().split()))
m = int(input())
b = set(map(int, input().split()))

res = sorted(a & b)
print(*res)
```

5-masala. Yonma-yon maksimumlar

Ketma-ketlik berilgan. Har bir yonma-yon joylashgan juftlikning maksimalini chiqaring.

Yechim (list)

```
n = int(input())
a = list(map(int, input().split()))

res = []
for i in range(n - 1):
    res.append(max(a[i], a[i + 1]))

print(*res)
```

6-masala. Chastotasi toq bo'lganlar

Ketma-ketlikda toq marta uchraydigan barcha elementlarni o'sish tartibida chiqaring.

Yechim (Counter)

```
from collections import Counter

n = int(input())
a = list(map(int, input().split()))

cnt = Counter(a)
res = sorted(x for x in cnt if cnt[x] % 2 == 1)
print(*res)
```

7-masala. Indekslar bo'yicha saralash

Massiv berilgan. Elementlarni qiymati bo'yicha o'sish, agar teng bo'lsa boshlang'ich indeks bo'yicha kamayish tartibida chiqaring.

Yechim (enumerate + sort)

```

n = int(input())
a = list(map(int, input().split()))

v = list(enumerate(a))
v.sort(key=lambda x: (x[1], -x[0]))

for i, x in v:
    print(x, end=" ")

```

8-masala. Eng uzun noyob bo‘lak

Ketma-ketlik berilgan. Takrorlanmagan elementlardan iborat eng uzun uzluksiz bo‘lak uzunligini toping.

Yechim(set + two pointers)

```

n = int(input())
a = list(map(int, input().split()))

seen = set()
l = 0
ans = 0

for r in range(n):
    while a[r] in seen:
        seen.remove(a[l])
        l += 1
    seen.add(a[r])
    ans = max(ans, r - l + 1)

print(ans)

```

9-masala. Eng yaqin qiymat

Massiv va son X berilgan. X ga eng yaqin elementni toping (agar teng masofa bo‘lsa — kichigini tanlang).

Yechim(list)

```

n = int(input())
a = list(map(int, input().split()))
x = int(input())

best = a[0]
for v in a:
    if abs(v - x) < abs(best - x) or (abs(v - x) == abs(best - x) and v < best):
        best = v

print(best)

```

10-masala. Satrlar bo‘yicha guruhlash

n ta satr berilgan. Bir xil uzunlikdagi satrlarni bir guruhga yig'ing va har bir guruh uchun satrlar sonini chiqaring.

Yechim (dict)

```
n = int(input())
groups = {}

for _ in range(n):
    s = input().strip()
    groups[len(s)] = groups.get(len(s), 0) + 1

for k in sorted(groups):
    print(k, groups[k])
```