

Finding Power Problem

Problem

Submissions

Leaderboard

Discussions

X and N are given. Find the value of X raised to power N i.e. (X^N).

NOTE-Solution taking $O(N)$ will be given 50% of the marks only.

Input Format

X N

Constraints

- $-50.0 < x < 50.0$
- $-2^{31} \leq n \leq 2^{31}-1$
- n is an integer.
- $-10^4 \leq x^n \leq 10^4$

Output Format

One value which is equal to X^N .

Sample Input 0

```
x = 2.00000  
n = 10
```

Sample Output 0

```
1024.00000
```

Explanation 0

Multiplying 2 10 times will be equal to 1024.

Sample Input 1

```
x = 2.10000  
n = 3
```

Sample Output 1

```
9.26100
```

Explanation 1

$2.10000^3 = 9.26100$

Sample Input 2



Contest ends in 2 days

Submissions: 0

Max Score: 0

Difficulty: Medium

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```
x = 2.00000  
n = -2
```

Sample Output 2

```
0.25000
```

Explanation 2

$$2^{-2} = 1/2^2 = 1/4 = 0.25$$

Target array

Problem

Submissions

Leaderboard

Discussions

Given an array of n size which is sorted in non-decreasing order and value target is given. Find the sum of index of first and last occurrence of the target in given array. If target does not exist in array return -1.

NOTE- Solving it in $O(N)$ will give the partial marks.

Input Format

N , size of array N values sorted in non-decreasing. Target value

Constraints

- $0 \leq N \leq 105$
- $-10^9 \leq arr[i] \leq 10^9$
- $-10^9 \leq target \leq 10^9$

Output Format

sum of index of first and last occurrence of target value.

Sample Input 0

```
6
5 7 7 8 8 10
8
```

Sample Output 0

```
7
```

Explanation 0

Target=8,

first index at which 8 occur is 3 Last index at which 8 occur is 4,

$3+4=7$ will be the output

Sample Input 1

```
6
5 7 7 8 8 10
6
```

Sample Output 1

```
-1
```

Explanation 1

as 6 does not occur in array so -1 will be written

Sample Input 2

```
7
1 2 3 3 3 3 5
3
```

Sample Output 2

```
7
```

Explanation 2

First index at which 3 occur is 2 and last index at which 3 occur is 5

so $2+5=7$

Smallest subarray

Problem

Submissions

Leaderboard

Discussions

Given an array `arr` of N integers. Find the contiguous sub-array(containing at least one number) which has the minimum sum. Return its sum. **Note** Keep in mind of constraint to get the full marks.

Input Format

N ,size of array
 N values of array

Constraints

 $1 \leq N \leq 10^6$ $-10^7 \leq A[i] \leq 10^7$

Output Format

minimum sum

Sample Input 0

```
7
3 -4 2 -3 -1 7 -5
```

Sample Output 0

```
-6
```

Explanation 0

subarray `[-4,2,-3,-1]` have the minimum sum of `-6`.

Sample Input 1

```
5
2 6 8 1 4
```

Sample Output 1

```
1
```

Explanation 1

Subarray `[1]` have the minimum sum of `1`



Contest ends in 2 days

Submissions: 0

Max Score: 0

Difficulty: Medium

Rate This Challenge:



Intersection finding

Problem

Submissions

Leaderboard

Discussions

Aman have X number of coins of many denominations(assuming we can have denominations of all values like 3,4 etc.),where arun have Y number of coins. One can have multiple coin of same denominations. Give the common denomination coins that both have.

Note If both have more than one coin of same denomination then it will be included more thn one times. **NOTE** Brute force will give only partial marks.

Input Format

First line:X(number of coins that aman have) Second line: X number of values denoting value of coin. Third line:Y(number of coins that arun have) Fourth line:Y number of values denoting value of coin.

Constraints

$$1 \leq X \leq 10^5$$

$$1 \leq Y \leq 10^5$$

All value lie between 1 and 10^5

Output Format

N values denoting denomination of coins that are common to both in **sorted order**.

Sample Input 0

```
7
3 2 1 3 4 5 3
3
3 3 5
```

Sample Output 0

```
3 3 5
```

Explanation 0

As both have coins of value 3 and 5 and both have atleast 2 coins of 2 so output would be 3,5

Sample Input 1

```
7
4 3 7 3 4 5 6
2
3 5
```

Sample Output 1

```
3 5
```

Explanation 1

Both have coin of value 3 and 5 so output is 3 5

parking spot

Problem

Submissions

Leaderboard

Discussions

Given arrival and departure times of all cars that reach at mall. Find the minimum number of parking slots required in mall so that no car has to wait for parking spot. Consider that all the car arrive on the same day and leave on the same day. Arrival and departure time can never be the same for a one car but we can have this same for 2 different car. If one car is leaving mall at 0910 and another car is arriving at mall at same time, then car arriving now can not use the same parking spot use by old car.

NOTE Time intervals used here is of 24 hour format(HHMM), where the first two characters represent hour (between 00 to 23) and the last two characters represent minutes (between 00 to 59)

Input Format

n, number of car array of n size giving arrival time of n cars. array of n size giving departure time of n cars.

Constraints

 $1 \leq n \leq 50000$ $0000 \leq A[i] \leq D[i] \leq 2359$

Output Format

Number of minimum parking spots required.

Sample Input 0

```
n = 6
a[] = {0900, 0940, 0950, 1100, 1500, 1800}
d[] = {0910, 1200, 1120, 1130, 1900, 2000}
```

Sample Output 0

```
ans=3
```

Explanation 0

Parking spot 1 will be use by car 1,2,5,6 Parking spot 2 will be use by car 3 Parking spot 2 will be use by car 4

There is no way all car can be parked using 2 parking spots for particular time slot

Sample Input 1

```
n = 3
a[] = {0900, 1100, 1235}
d[] = {1000, 1200, 1240}
```

Sample Output 1

```
1
```

Explanation 1

As there is no clashing of leaving of one car and arrival of another car in mall so only 1 parking spot is required.