

Question 1

You are given a list of integers where every number appears exactly twice except for one number that appears only once. Write a function to find that single unique number.

Example:

Input: [4, 3, 2, 4, 1, 3, 2]

Output: 1

Question 2

You have a Pandas DataFrame with columns: `customer_id`, `purchase_date`, and `amount`. Write code to find the top 3 customers with the highest total purchase amount in the last 30 days.

Question 3

Given a 2D NumPy array, write a function to normalize each row so that the values in each row range between 0 and 1.

Example Input:

```
[[10, 20, 30],  
 [5, 15, 25]]
```

Example Output:

```
[[0.0, 0.5, 1.0],  
 [0.0, 0.5, 1.0]]
```