Question1: Merging Arrays.

Write a program to merge two un-sorted arrays into a new sorted array.

## Example:

Input: [12,45,6,22] [3, 9, 15, 64, 2]

Output: [2,3,6,9,12,15,22,45,64]

Note: Assume that, the input (array elements) may have duplicate values. In that case, you can take any one from the duplicate while merging.

Note: Read inputs dynamically from console. Don't hard code.

Question2: RestaurantTokenSystem

Write a class-based program which handles restaurant token system. The program should handle the following functions.

- Show welcome message to user "Welcome to automated token system"
- Customer should be able to choose from the following options.
  - o Show Menu 1
  - o Order Item 2
  - See order status 3
- If customer selects the option-1, we should show the following menu items.
  - o Idly 11
  - o Dosa 22
  - O Uthappam 33
  - o Bread & Omlette 44
  - o Poha 55
  - o Pastha 66
- Minimum time takes to prepare items are.
  - Idly (5min)
  - Dosa (10min)
  - O Uthappam (10min)
  - Bread & Omlette (15min)

- Poha (5 min)
- o Pastha (10 min)
- Write a class method which returns a random number in a range of (5 to 30). This method should be used whenever the customer places an order.
- When customer places an order, we have to run the random method, which gives a random number between 5 to 60min. If the number is less than the minimum preparation time of the selected item, we have to show that you cannot place an order for the selected item. Instead, customer can select the items which have preparation time less than the random number
- For example,

If user selects Dosa(10min), and the random number generated is (5)

Actual time required to prepare a Dosa is 10min. So, the user should get the following output.

Sorry, your order couldn't not be placed. You can choose from the following.

- Idly
- Poha
- If user selects an item, from the list which is equal or greater than the random number, then you have to show the following message
  - Your order has been successfully placed. Enjoy your meal.

{selectedItem} - Will be ready in {random\_number} minutes.

 NOTE: Every list option should have exit as an option in order to quit the program.