Activity

We are given n arrays of any size which may have common elements, we need to combine all these arrays in such a way that each element should occur only once and elements should be in sorted order.

Examples:

Input : arr = [[1, 2, 2, 4, 3, 6],
        [5, 1, 3, 4],
        [9, 5, 7, 1],
        [2, 4, 1, 3]]
Output : [1, 2, 3, 4, 5, 6, 7, 9]

```python
# Function to combine n arrays
def combineAll(input):
    # cast first array as set and assign it
    # to variable named as result
    result = set(input[0])

    # now traverse the remaining list of arrays
    # and take its update with the result variable
    for array in input[1:]:
        result.update(array)

    return list(result)


# Driver program
if __name__ == "__main__":
    input = [[1, 2, 2, 4, 3, 6],
             [5, 1, 3, 4],
             [9, 5, 7, 1],
             [2, 4, 1, 3]]
    print(combineAll(input))
```